

THE SOCIAL EFFECTS  
*of*  
PUBLIC HOUSING



Housing Authority of the City of Newark

Newark, N. J.

1944

1944

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MAP OF NEWARK SHOWING THE LOCATION OF THE HOUSING PROJECTS

A Study of  
The Social Effects of Public Housing  
In Newark, N. J.

This study was conducted by Dr. Jay Rumney, Professor of Sociology, University of Newark, and Consultant to the Housing Authority, and Sara Shuman, M. A., the Authority's Research Associate.

HOUSING AUTHORITY OF THE CITY OF NEWARK

57 Sussex Avenue

Newark 4, New Jersey

NOVEMBER, 1944



## Acknowledgments

This study owes its inception to discussions begun about a year ago by the members of the Newark Housing Authority, the Executive Director, and the City Commissioners of Newark, on the subject of the social effects of housing. While the social consequences of bad housing and slums were well known, very little precise information was available on the benefits which might be derived from improved housing. The public housing program of this city provided an excellent opportunity to make such a study. An investigation of this type seemed particularly relevant in view of the important role public housing will play in the post-war world.

The Housing Authority is especially mindful of the co-operation of Commissioner Villani, and the interest he has shown in its activities. As one of the agencies that fall under his jurisdiction, he has made every effort to make the people of this city aware of the importance of good housing to the welfare and progress of the community.

The Housing Authority is indebted for their co-operation to the following members of the Federal Public Housing Authority; Philip M. Klutznick, Commissioner, Warren Vinton, Chief Economist, David L. Krooth, General Counsel, John A. Ker-

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**Part One**  
**Introduction**



# Introduction

Recent government reports, both in England and in this country, have drawn attention to the imperative need for improving the health of the people. In order to do this, a concerted program of public welfare will be necessary, in the forefront of which must be a program of good housing. The role of public housing to supply homes for that part of the population which cannot afford to buy or rent adequate dwellings—is likely to increase in the post-war period. Therefore, the experience we have already gained from the operation of public housing projects is of great interest. An important aspect of the public housing program—the social effects on the rehoused families—is examined in this study.<sup>1</sup>

Many studies have been made of the social effects of housing, but the approach has generally been a negative one, that is, establishing the relationship between bad housing and undesirable social conditions, such as ill health, delinquency and crime, fire hazards, etc. These studies have been of great value, for indirectly they imply the relationship between good housing and the elimination of these undesirable conditions.

In Europe and especially in England, where the public housing program is far more advanced than it is in this country, some studies have been made of the social effects of public housing. However, in this country, we have been unable to find any

study which has attempted a comprehensive investigation of this question.

When studying the relationship between health and other social conditions and inadequate housing, it must be kept in mind that substandard housing is not a factor that operates in isolation. It is usually accompanied by other consequences of a low income, such as a low level of nutrition, lack of adequate medical care, lack of education, etc. These facts must be taken into account when comparing a badly housed population with a well housed one. However, these factors are essentially equalized when comparing a publicly rehoused population with groups living in inferior housing, because the economic status of both groups is similar, even though the housing of one group is much better.

The removal of families from substandard to unquestionably superior dwellings offers an ideal experimental situation for determining the effects of housing. The problem of eliminating from the situation all variables but that of housing is, of course, a difficult one. But, the major step of subjecting a population to two sets of conditions, in order to be able to note the effects and results of each, is taken in the very process of rehousing.

It is the object of this study to determine some of the specific social effects of public housing, and indirectly to show how, with good housing, the whole social environment of the community can be improved.

<sup>1</sup> In March, 1944 the Newark Housing Authority issued a pamphlet giving some of the preliminary results of this investigation. In the present report more accurate population estimates were used, and the data for 1943, which were then available for only part of the year were brought up to date. These changes account for some slight differences between the rates in this and the preliminary report.

# Our Approach To The Problem

## The Method

There were two possible methods of studying the social effects of rehousing families coming from substandard dwellings. The first method was to compare the health and social conditions among the families living in the public housing projects, with the conditions that prevailed among them before they were rehoused. However, due to the many changes brought about by the war, such as the increased employment of women, higher wages, the drafting into the armed forces of a part of the population, etc., it was felt that too many new elements had been introduced into the situation besides that of the improved housing, to adopt this method exclusively. Before and after comparisons, however, were utilized in making case studies of some of the rehoused families, but, in the greater part of the study a second method was adopted. This method was based on the use of control groups.

Three housing projects were selected for study: James Baxter Terrace, the city's largest project, which was built on a cleared slum site; Felix Fuld Court, which is located in the worst slum area of the city; and Stephen Crane Village, which was one of the first projects opened in Newark. The city is divided into sixteen wards, three of which, one for each project studied, were selected to constitute the control groups.

The families in each project were compared to the families in a ward. The ward was selected on the basis of having a population of similar socio-economic status to the rehoused population, and because it represented an environment typical of that from which the project residents came. In other words, except for their housing, the ward families were of the same type of background as the rehoused families.

## The Criteria

To give precise meaning to the term *social effects of housing*, certain criteria were selected by which the rehoused groups could be compared with similar groups living outside of the projects. The following indices were used: health conditions, including infant mortality, tuberculosis, contagious diseases, and fatal home accidents; fire rates; school records, including school attendance, academic achievement, personality traits and health habits; and other indices such as birth rates and delinquency rates.

In addition to a statistical study of the frequency with which these indices occur in the rehoused and the control groups, a sample of 71 rehoused families, representing 5.5% of the families living in the three projects studied, were interviewed. Sixteen families awaiting admission to a project were also interviewed. These interviews not only yielded additional data on some of the above indices, but also gave us valuable supplementary material on the effects of rehousing families coming from substandard dwellings.

In this type of investigation the validity of the results depends largely upon the reliability of the control groups. Their selection was a major problem of this study. We attempted to select control groups that were similar to the experimental groups in all relevant respects but that of the one variable being studied, in this case, housing. It was possible for us to match the two groups only on the basis of certain general characteristics. Although, the interpretation of the results must proceed cautiously, we believe that differences between the two groups, can be attributed primarily to the differences in the housing situations. We believe that our method enables us to draw a number of valid conclusions to be found in the following pages.

The problem of interpretation was made difficult by the fact that the projects are of such recent construction that they do not afford an adequate time span in which to appraise the effects. However, although two years is not a sufficient period from which to make conclusive generalizations, there is every reason to believe that the benefits of public housing to its occupants, will increase over a longer period of time. We cannot expect that the effects on the health and habits of persons who have lived in substandard housing for years, will be counteracted immediately upon moving into healthful homes, such as those provided by public housing. The assumption that improvements will grow greater with time is supported by the fact that for every health condition we investigated there was a better record for the combined housing projects for the second year studied, than for the first.

We suggest that follow-up investigations be made along the line of this study, for rehoused populations that have lived for longer periods under unproved housing conditions than was the case in our study. In this way more complete data and more conclusive results will be obtained.

## **Part Two**

### **Interviews, Case Studies, And Letters**





A PROJECT KITCHEN--THERE ARE 245 MORE LIKE IT IN NEWARK'S PROJECT HOMES





KITCHEN OF A FAMILY AWAITING ADMISSION TO A HOME IN A PROJECT

## How The Rehoused Families Live

Before going on to the statistical aspects of our study we attempted to get a more personal picture of how the project residents live by interviewing some of them. In order to have a basis for comparison, we also interviewed a number of families who were eligible for project apartments, and were waiting for vacancies.

Seventy-one rehoused families with at least two years residence in the project, and sixteen families on the waiting list were interviewed. The 71 families constitute about 5.5% of the total number of families living in the three projects studied. They are all low-income families with an average annual income, at the time they moved into the project of \$974 93. The other families interviewed were the first sixteen whose applications were accepted during the period we were arranging for these interviews. Since their applications were accepted it indicates that these families too had low incomes,

and that they lived in substandard dwellings.

We attempted to make our sample of rehoused families representative of the total population of the projects by selecting at random a number of families from each ethnic group in proportion to their number in each of the projects. Within each group were included families of every size and composition.

The interviewer was guided by a list of questions, which were indirectly brought up in the course of the interview. On returning from the visit the worker filled in the questionnaire and wrote up an account of the interview, including personal impressions of the home and the family.

Following is a summary of the results taken from the questionnaires of the 71 rehoused families. The questionnaire is reproduced and following each question are the results of the 71 interviews



ADDRESS Apt. 2A RACE W NATIONALITY Am It. NO 57 INTERVIEWER AWP  
 LENGTH OF OCCUPANCY 2 1/2 yrs. PLACE OF BIRTH (of Head) Newark DATE 1/2 44

Name	Relationship (to head)	Age	Sex	Occupation	Activities	
					Before	After
Grandi, Joe	Husband	34	M	Laborer	Church, Movies	Same
" Anna	Wife	33	F	Housewife	" "	Same and project welfare society
" Philip	Son	13	M	School	Church, Boy Scouts	Same
" Marie	Daughter	11 1/2	F	School	Church	"

1. Is tenant satisfied with apt.?

18 Yes very much so  
 45 Yes  
 6 Yes with reservations  
 2 No

71

2. Is there any difference in the children's school records since moving into the project?

21 Children show general improvement  
 3 Children show improvement in appearance  
 3 Children show improvement in appearance and attendance  
 11 Children show no change  
 1 Child shows worse record  
 32 No children or under school age

71

3. Do the children have colds and other common illnesses more or less frequently?

27 Have colds more frequently  
 10 Have colds less frequently  
 31 No change  
 3 No children

71

It is possible that the greater frequency of colds in many families since living in the project was due (1) to the problem of adapting themselves to central heating, (2) condensation that many of them were troubled with because they did not know how to ventilate their apartments properly, (3) and the fact that the war situation made it impossible to get enough fuel to keep the apartments warm enough the whole day.

4. Are the children more easily kept clean?

67 Yes  
 1 No difference  
 3 No children

71

5. If mother works who takes care of children?

58 Mother at home  
 2 Oldest child  
 2 Neighbor  
 2 Left alone  
 1 Tenant's mother  
 1 Father (unable to work)  
 1 Mother works nights  
 1 Mother takes child to school and calls for him after work  
 3 No children

71

6. Do the children have better play facilities than before?

67 Yes  
 4 No children or very young

71

7. Is there less adult illness and absenteeism?

54 No change  
 7 More colds  
 10 Less colds

71

8. Do members of the family participate in community activities?

There is little participation in community activities. The most frequent is church membership. Nine women and one man belong to some

organization in the project. Aside from this there were one or two who belonged to political clubs and Parent Teacher Associations.<sup>1</sup>

9. How does the family spend its leisure time?

- 55 Reading (mostly newspapers, some read magazines and fewer books)
- 38 Sewing, mending and knitting
- 36 Visiting and entertaining
- 22 Movies
- 9 Cubs
- 8 Listening to radio
- 4 Walking
- 3 Art work
- 2 Playing cards
- 2 Sports
- 2 Dancing

These figures add up to more than 71 because most of the families listed more than one activity.

10. Do they have an automobile? A telephone? A radio? Has the family been able to afford more luxuries due to their living in the project? (Exclude effect of war situation.)

- (a) 67 Have radios
  - 2 Have telephones
  - 2 Have pianos
  - 1 Has an automobile
- (b) 48 Have been able to save more money or buy more things
  - 21 Have not been able to save more
  - 2 Have not been able to save more due to family emergencies

—  
71

11. Is more or less time required for home care since moving into the project? About how much?

- 40 Less time (31 said 1/2 to 1/3 less)
- 16 More time
- 7 Same time
- 8 Didn't know

—  
71

12. Has the changed housing situation affected family relations?

- 55 Happier
- 4 Less happy (The reasons given: rent fluctuates, rent too high, gossiping neighbors, overcrowded)

12 No change

71

Below, in order of the frequency of their mention, are the conditions to which those families which were happier attributed the change; more privacy, "nicer home", more facilities and conveniences, more space.

13. Have there been any fires or serious home accidents?

71 No

14. Is the living room used for sleeping purposes?

63 No  
8 Yes

71

This means that about 11% of the 71 families use the living room for sleeping. In the Los Angeles project studied,<sup>2</sup> 57% of the families were using their living rooms for this purpose.

### Family Backgrounds

Each family that makes application for an apartment is given a housing need score. These scores generally range from about 40 to 150. For the 71 rehoused families the scores ranged from 31 to 140. The average score was 77. On pages 13 and 14 is a housing need score sheet, made out to show a typical situation.

On the reverse side of this scoring sheet is a summary of other pertinent data. For the 71 families the average annual income when moving into the project was \$974.93. The average monthly rental before moving into the project was \$24.05. In some instances this includes utilities. After moving into the project the average rent was \$21.81. The project rent includes gas, electricity, heat and refrigeration. This gives an annual average decrease in rent of \$26.88, plus the amount previously spent for utilities.

The occupations of the wage earners in these 71 families are listed below. This list has undoubtedly been affected by the war situation, as have the incomes of these families, which would now be much higher than they were at the time of their admission to the projects.

<sup>1</sup> A study of a Los Angeles housing project revealed that between 75% and 80% of the residents did not participate in any community activities. "Public Housing Looks at Itself," Raymond E. Nelson, *The Journal of Property Management*, Dec. 1943, p. 125.

<sup>2</sup> Ibid.

# Occupations of Wage Earners in the 71 Project Families Interviewed

Machine Operator	11	Molder	1
Laborer	10	Motor Winder	1
Shipping Clerk	4	Needle Brusher	1
We der	3	Nurse	1
Assembler	3	Porter	1
File Clerk	2	Powder Maker	1
Guard	2	Pump Grinder	1
Truck Driver	2	Room Clerk	1
Press Operator	1	Ship Fitter	1
Bag Maker	1	Ship Steward	1
Bartender	1	Shoe Salesman	1
Bricklayer	1	Soldier	1
Bus Boy	1	Stenciler	1
Candy Maker	1	Stevedor	1
Cashier	1	Store Helper	1
Checker	1	Target Maker	1
Chef	1	Truck Helper	1
Cobbler	1	Tube Maker	1
Creaser	1	Utility Man	1
Furnace Operator	1	Waiter	1
Grinder	1	Winder	1
Inspector	1		
Lathe Hand	1		
Maid	1		
			74

## Case Studies of Rehoused Families

Following are some typical situations found among the rehoused families. These families came from each of the three projects and represent every ethnic group in the projects.

### Family A

This family of seven persons regarded their present living quarters as far superior to their old quarters which, in addition to being damp and overcrowded had no heat, bath or inside toilet. Since living in the project the children had improved in appearance and cleanliness, and had better play facilities. The parents participated more than previously in community activities, had more time for reading, and had more money for small luxuries. They appreciated the greater space and privacy which they regarded as essential to family happiness. The mother was of the opinion that her household duties took about two-thirds of the time they had previously.

### Family B

This family of five persons expressed great satisfaction with their present apartment and regarded it as far superior to their old quarters which consisted of four rooms, no bath, a toilet in the back yard and no heat other than that from

a kitchen stove. Since living in the project the family has bought new furniture. The daughter, according to the mother, has improved in her school work, is now kept clean more easily, and has benefited a great deal from the recreational facilities provided at the project.

### Family C

Mrs. C, her two young daughters, and her husband who is now in the army, had previously occupied two rooms in a third floor attic where there was no heat or bath, and everything was in need of repairs. The toilet was on the second floor and the whole house was overcrowded. She expressed a great liking for her present apartment and for the refrigerator which enabled her to keep the food fresh. The mother said that the two children had improved in health and in their school work. They played a great deal in the project playground. Since moving into the project Mrs. C has purchased some living room and kitchen furniture.

### Family D

This family of four came from a congested neighborhood where they had four rooms on the fourth floor with no facilities other than a toilet. Mrs. D especially appreciated the playground for her children who before had played on a traffic congested street. She stated that since moving into the project she had been able to buy a sewing machine and a victrola-radio. The conveniences in her apartment, she added, enabled her to keep the apartment and the children "spic and span."

### Family E

The previous home of this family of four had been in a rear building which was unfit for use, infested with vermin, and had no bath. The only heat was that supplied by an old coal stove. There was no electric lighting. Mrs. E. enjoyed the conveniences in her apartment and she and her children use the project library, and other project facilities a great deal.

### Family F

This family of six previously resided in a four room dilapidated, vermin infested apartment which the landlord refused to repair. A coal stove was used for cooking and heating water. The apartment lacked gas, electricity, and a bathroom. A hall toilet was shared with other tenants. The present facilities, Mrs. F thought, were contributing factors in improving the health of her family. She especially appreciated the adequate playground which enabled the children to play in the open air, and the social hall and hobby room where the children were also supervised. The children who were nervous and sickly before coming to the project were now feeling much better. Mrs. F. added that about half the time was now required for housework, as was previously.

## HOUSING AUTHORITY OF THE CITY OF NEWARK

## SUMMARY

## OCCUPANCY

Sex	Age
M	37
F	35
F	14
M	13
F	10
M	7

Unit  
Required5 1/2Name Ralph WarrenAddress 372 Delam ShHOUSING SCORE 77INCOME \$974.93INCOME - Maximum Limit \$1250On Application \$950On Verification 974.93Sources PrivateRemarks Employed at same  
job 2 yrs.HEALTH 0CHILDREN 10

PROXIMITY

Project

Employment

## ECONOMIC FACTORS

Effect of Moving on Family Expense

Present Project

Rent \$234.63 \$261.76Other  
Housing Costs 54.00Transportation SameTotal \$288.63 \$261.76Total Annual Change \$26.87Rent Record StableIndebtedness None

Remarks (other expenses, assets, etc.)

Necessary to secure  
some furnitureScored by LTD

Interviewer

Date 3/17/40Remarks Youngest child has rheumatic fever  
and must have warmer homeReviewed by ADS

Ten. Rel. Dir

Date 3/29/40

## HOUSING NEED SCORE SHEET

ITEM	BASIC SUBSTANDARD FACTORS	CHECK	SCORE	SECONDARY SUBSTANDARD FACTORS	CHECK	SCORE
1. LOCATION	Alley, Basement or Building in rear			Attic or Walkup more than 3rd floor	S M	
2. CONDITION OF STRUCTURE	Unfit for use or in need of major repairs			In need of repairs	S M	✓ 5
	Extreme dampness			Dampness	S M	✓ 5
3. INFESTATION	Acute Infestation			Infestation		✓ 2
4. WATER SUPPLY	No running water, children or persons over 60 and no hot water	✓	10	Adults, no hot water, or inadequate	S	
5. TOILET	No inside toilet or unfit for use	✓	10	Inside toilet inadequate	S M	
6. BATH	No bath or shower, or unfit for use			Bath or shower in poor condition	S M	
7. KITCHEN	No permanent equipment or unfit for use			Poor conditions	S M	
8. LIGHTING	No electricity or unsafe			Inadequate		
9. HEAT	Inadequate facilities, where children or persons over 60	✓	10	Poor condition, costly or in part of a home hard to heat	S M	
10. LAUNDRY	Children and no facilities			No facilities		
11. ROOM ARRANGEMENT	No privacy	✓	10	Inadequate with adults		
12. LIGHT AND VENTILATION	No direct ventilation in kitchen, bedrooms or toilet	✓	10	Inadequate- children		
13. FACILITIES SHARED	Toilet, bath or kitchen shared by more than two families			Railroad or undesirable, inadequate privacy	S M	
14. OVER- CROWDING	Acute (more than 2 persons per BR + 1)	✓	10	Inadequate, windows on alley, airshaft, or too small	S M	
15. DOUBLING UP	In deficient accommodations or where children			One or more facilities shared by only two families	S	
16. NEIGHBORHOOD	Hazard to health, safety or morals			Minor		
17. SECONDARY FACTORS DANGEROUS TO H.S. or M.	Serious or where children			Doubling up	S M	
				Undesirable, industrial or commercial	S M	
18. FIRE HAZARD	Non-fireproof structure with inadequate exits			Minor hazards		
	Oil stoves or lamps in non-fireproof buildings			Coal Stoves in non-fireproof buildings		✓ 5
	Defective flues or wires			Other Serious Factors		
	Other Acute Factors			Other Minor Factors		
	Total		60	Total		17

Remarks:

GRAND TOTAL

77

#### *Family G*

This family of seven had lived in a vermin infested, congested apartment with no modern facilities. A coal stove in the kitchen was the only method of cooking and was also used for heating. There was no bath room and the toilet was in the hall. Mrs. G. thought the children had improved in school, and she was enthusiastic about the playground, the hobby room and the recreation hall where the children had been taught many useful things, such as basket-making and sewing. Mrs. G. stated that the housework takes her about half the time it did previously, and that since she was paying a difference of only three dollars in the rent, and had gas, refrigeration, electricity and heat supplied she was able to purchase more necessities for the children and more items to beautify her home.

#### *Family H*

This family of six had previously occupied a four room apartment, infested with vermin, and with an outside toilet. Now they had all facilities and a five room apartment for \$20.25, as compared with the previous rental of \$23.00. Mrs. H was very happy with her new home because it provided outdoor space where the children could get plenty of fresh air and because her apartment was easier to clean. She added that since moving she had

been able to buy new furniture and provide more things for the children.

#### *Family I*

This family of four had previously lived in one room, which had a two burner gas stove which was used for cooking. The bathroom, on another floor, was shared by all the tenants. Mrs. I. was very much satisfied with their present apartment because it not only removed them from an overcrowded situation, but also provided better play facilities for the children and reduced their living expenses so that they could afford more necessities and comforts. Mrs. I. stated that the children had improved in health and school work and that her housework took less time.

#### *Family J*

Mrs. J's former home consisted of four rooms where water and a bathroom were not available and the toilet was shared with other tenants. She was pleased with her new home which afforded her family every convenience. Because of the low rental, they could afford many more things for themselves and the home. She thought that the children had improved in school attendance, appearance and academic grades, and that since living in the project they had taken a personal pride in their appearance and work.



## Letters From Project Residents

The following letters, reproduced exactly as received, are from three of the families which moved into the first public housing project built in Newark:

Pennington Court,  
Newark, N. J.  
March 9, 1940.

Dear \_\_\_\_\_

I take the greatest of pleasure in writing you to let you know that I just moved to my new home March 1, 1940, and how happy I am to live in such a nice warm place. After living in such dilapidated places, where the halls were half lighted by lamps, water pipe frozen, water cut off in toilet, or toilets out side, very little ventilation, broken walls, screeking floors, window like open air shafts, roaches, ants, rats and smoke from coal stove it is like moving in Paradise. After living in houses like I just described, I just can't really believe it is I. Whenever I go out and return home and unlock the door I feel like screaming with joy. I must say that the U. S. H. A. is one of the greatest things that ever happened in U. S., for the poor class of people. I can't find words to express my feeling. But if you could come down and have dinner some evening with my family and I, I am sure the expression on my face will tell you more than I could ever put into words.

Miss \_\_\_\_\_ I am glad that I was among the ones chosen for the Pennington Courts, and to show you and the government which you represent how much I appreciate it, I shall always try to be a good wife, mother and neighbor, and keep my children and house clean. My housework is a pleasure to me now. And too, I shall try to abide by all the rules and regulations at all times to the best of my ability. I again praise you and government for this happy event in my life. I am going to try to be a good American citizen and also my children. We are indeed a happy family for once in my married life. Looking to hear from you soon.

Very truly,

Mrs \_\_\_\_\_

Pennington Court,  
Newark, N. J.  
March 7, 1940.

Dear \_\_\_\_\_

In the midst of my very busy yet pleasant task of getting settled, I feel that it is both fitting and proper that at the end of this, the first week in my new home at the above address, I should pause for a while to express my sincere gratitude to you and all concerned in regard to the new housing project provided for the less fortunate in the Ironbound district.

I was born in this section and have lived here all my life. I learned the three R's at the South Street School. The comforts of both the home in which I was brought up and in which I have been endeavoring to bring up a family for the past fourteen years have been far from ideal. There were almost no modern improvements, and I was oftentimes in despair over the utter hopelessness and helplessness of my situation. Realizing that environment means much in the rearing of children I of course wanted a quiet, neat, comfortable place for the three which God had given me, but my husband's income was small and we could not afford anything better.

When the first announcement of the prospective low cost housing project appeared in local newspapers, my husband and I decided that we would make application for an apartment; and now thanks to you and all concerned here we are all fixed off in these five lovely rooms with all modern improvements. It all seems like a beautiful dream. Here at last I have the comfortable place that I have always wanted for my children. The court yard makes a safe pleasant place for them to play. When they come into the apartment the cheery brightness of the rooms seems to be reflected in their faces. They now take a real interest in doing their part in keeping things tidy. They are to all appearance happy, and that of course, makes me happy.

Mr. \_\_\_\_\_ joins me in expressing my appreciation to the Newark Housing Authority for the wonderful service which they have rendered this community in the erection of this project.

Sincerely yours,

Mrs \_\_\_\_\_

Pennington Court,  
Newark, N. J.  
March 17, 1940.

Dear —

Only my sincere happiness and joy have prevented me from writing to you, sooner, to express my many thanks. My little apartment has seemed a virtual paradise, and for several weeks I have been living in a world of my own. I know you will forgive my laziness in not writing to you sooner

Depressions and recessions have taken their toll from all of us. First, as a home owner, the constant dread of foreclosure arrived; then the apartment with the ever hanging sword of eviction, and this consummated; following this I move seven times in four and a half months. I moved from place to place, entirely at the mercy of friends and relatives

Can you, then, visualize my feelings? Can you appreciate my happiness? Here I am, enjoying every necessity, yes, even luxury, at

a rental within my means I caress every door, I could embrace every piece of cement that forms this virtual paradise, on earth.

My own contentment is small, compared to the happiness of my daughter, Ada has her own physical problem. She always overcame this, by engaging whole heartedly in her school work and music. In our shifting from place to place, her marks fell from scholarly to failure. In the few short weeks, her school work is again normal, and her music progressing. For her, it has been a complete rehabilitation,—she is happy, content and energetic.

Pardon the flowering expressions of a completely happy family. I could go on, writing a book in trying to explain the extreme pleasure of my new home, but no words could really express the inner mental feeling. But let me convey to you and to your associates my sincere thanks and appreciation for all you have done to bring us to this happy state.

Sincerely,

Mrs ———





## How Families Waiting To Be Rehoused Live

Following are the results of the interviews with sixteen families whose applications were approved and who were waiting for vacancies in the projects. These were the first sixteen families to make applications which were accepted, during the period we were arranging for the interviews.

Some case histories showing typical housing situations of the families waiting to be admitted to public housing projects, are presented after the analysis of these questionnaires.

The average housing-need score of these sixteen families was 58. This is lower than the average score of 77 for the rehoused families. Those families already living in the projects came from some of the worst housing in the city and therefore they were rehoused first. However, as their case histories will indicate, the dwellings of the families waiting to be rehoused are still *extremely inadequate*.

The first question in the interview was:

1. Does the mother think that better housing would affect the children's school work?

5 Felt that they would improve  
4 Unable to say  
7 No children, or not in school

16

2. Does the present housing affect the children's health?

12 Yes, it is harmful to their health  
1 No  
2 No children  
1 No answer

—  
16

3. Are the children difficult to keep clean?

11 Yes  
2 No  
2 No children  
1 No answer

16

4. Are play facilities adequate?

12 Have no play facilities  
2 Children too young  
2 No children

16

5. Have there been any serious accidents in the home?

11 No  
5 Yes—2 serious injuries from falling down poorly lighted stairs, 3 stoves exploded

—  
16

Whereas, among the 71 rehoused families there was not one serious accident, among the sixteen families in substandard housing 31% had such accidents.

## Families in Substandard Dwellings

### Family K

This family of four resides in a five room apartment which rents for \$15 monthly. They use only two rooms during the winter because of the heating situation. The oil stove in the kitchen is used for heating and cooking. The bedrooms used by the K's adjoin the kitchen. One bedroom has no heat and is like an ice-box, consequently, this room is closed off from the two rooms that are warm. When Mr. K. works days the four members of the family sleep in one bed. When he works at night, Mrs. K. and the two children sleep in one bed, and Mr. K. sleeps in it during the day. The walls have large holes in them which makes it impossible to retain the heat. Mr. K. lost two months from work because of a severe cold which developed into pneumonia. Due to a faulty water back in the stove, it exploded causing first degree burns to Mrs. K. and the youngest child. This accident and the numerous illnesses of the children has resulted in high medical costs. The children play in a street which has a high accident frequency, and Mrs. K. complained of the difficulty in keeping her place habitable.

### Family L

Mrs. L., her son of two years, and her mother of sixty-one years, live in one room which has no heating facilities at all. They sleep in one bed and have kitchen privileges only for the breakfast meal. The toilet, shared by all the people in the house, is in filthy condition. There are no provisions for doing the laundry of the baby or the other members of the family.

### Family M

Mrs. M. (separated from her husband), and her two sons, of sixteen and fourteen years, sleep in one room which has two beds in it. The cooking stove in the kitchen is the only heating facility in the home. There is no bathroom available, but an inside toilet adjoins the kitchen. Most of the meals are eaten by the family in a restaurant, and baths are taken in the homes of friends.

The two cases which follow were taken from the files of the Tenant Selection Division.

### Case 1.

Mr. and Mrs. Z. are a young couple, nineteen and twenty-one years of age. They have two boys, both under two years. They have never had a real home but have lived in furnished rooms ever since their marriage. Even a furnished room would look like a palace to them at the present time, if they had it all to themselves. They were forced to leave their last home with Mr. Z's sister, because someone reported to the

Board of Health that there were nine people living in four rooms. They looked in vain for a place to live but couldn't find any so Mrs. Z's mother took them into her home of three rooms. Besides her mother and a single sister who ordinarily occupy these three rooms, Mrs. Z's married sister, who is separated from her husband, and her two children are also living there. The mother and sister occupy the one bed in the bedroom; the married sister and her two children use the living room settee, the baby sleeps in a carriage and Mr. and Mrs. Z. and the two year old child sleep on the floor. Seven people sleep in one room. The kitchen cannot be used to sleep in as there is no window in it. The door is left open in the daytime for ventilation but of course can't be done at night. There is no bath in the home only cold water at the kitchen sink, and the porch toilet is shared with two other families. The Z family can afford a decent home—it isn't a matter of finances but a HOME cannot be found. Mr. Z is a truck driver earning \$120 an hour so always makes between \$50 and \$60 a week.

*This is one of a dozen such families we cannot take care of because their incomes are too high. Yet, they are unable to find a decent home in the city*

### Case 2

Mr. and Mrs. W. and family were referred to us by the Department of Health as being in a particularly bad spot. The family of four, parents and two small children, were sharing a five room apartment with two other families making six adults and five children in all. Not only were they unbearably overcrowded but the house was in such condition that the Sanitary Division of the Department of Health had served notice on the landlord to make the necessary repairs which had not been done. In the bargain the flat was badly infested with vermin.

The sleeping arrangements in the family were most unsatisfactory. The baby slept in the carriage and the other child slept with the parents on a small cot. They had no privacy as the entry to and from the flat was through their room.

The only rebex belonged to a brother who was not on friendly terms with the others, therefore most of their foodstuff and the baby's milk were kept on an outside windowsill.

For these accommodations \$12.50 was paid per month. The family evidently was not without hopes, however, as furniture had been purchased and paid for, to be delivered to a new home when and if one could be found. This had been found to be impossible, however, as nowadays landlords will not accept families with children, that is, with the exception of the Newark Housing Authority. We hope to be able to place this family next month.



A PROJECT LIVING ROOM WORTH LIVING IN



THE FURNITURE IS NOT BUT IT IS NOT A ROOM TO LIVE IN

## Views On The Importance Of Housing

To round out our investigation we contacted a number of people in the fields of education, social work, probation, health, etc. to get their opinions, from the point of view of their work, on the importance and influence of housing on the community. The statements that follow are typical of those we received, and they come from persons who have wide knowledge of the conditions and problems of the city. In general they concurred in the view that rehousing had had salutary effects, and that good housing is essential to the welfare of the community. We are indebted to them for permission to print their comments.

*Edward L. Parker, The Social Service Bureau of Newark, N. J.*

There is no question whatever that those families who now live in housing projects in many instances now enjoy a degree of physical comfort never previously experienced. The majority seem to reflect a certain natural pride in living in decent rather than ramshackle quarters. Rather especially in the case of children, a good deal of mortification used to exist in having friends and acquaintances see them returning to hovels and dives, whereas now in the housing projects many feel a sense of self respect and satisfaction which never before existed.

*Dr. Julius Levy, Director, Division of Child Hygiene, Department of Health, Newark, N. J.*

It is so obvious that everyone should have an opportunity to obtain adequate housing that I would not think it was necessary to prove that it has a beneficial effect upon the incidence or mortality of specific diseases. It has been found true particularly in diarrheal diseases of young infants, contagious diseases, and especially tuberculosis. Sunlight, fresh air, and an opportunity for normal, wholesome family living are desirable for personality and character development as well as for health.

*Mrs. Sophia Lauterbach, Headworker, Fuld Neighborhood House, Newark, N. J.*

I am not able to give you any facts or figures to prove my conviction that sub-standard housing increases the unruly behavior of young people. There can be no home life without a home. Crowded quarters, rooms in which adults and children have to sleep together, rooms which have to be used for all purposes—sleeping, eating and leisure, the impossibility of privacy, inevitability of dirt, bad toilet facilities, degrade the family in the very roots of its life. It would certainly be absurd,

in the light of the accumulated knowledge of the effect of misery, frustration and tension in the lives of the parents, to expect that children growing up in such conditions would fail to be the easy prey of every anti-social influence our troubled times might bring to birth. Homes such as those we know about here, are a horrible environment for any child, from the simple physical health standpoint apart from any other. But other considerations are of paramount importance. I doubt whether many women living under such circumstances can establish sufficient psychological stability to reach a minimum standard of good motherhood.

*Joseph P. Murphy, Chief Probation Officer, Essex County Probation Service, Newark, N. J.*

Unquestionably, in these families who have been fortunate enough to be admitted to the housing projects, the effect has been altogether wholesome. We do believe that the physical environment, including all of the facilities for recreation, improved sanitation, more favorable associations, etc., have been of great benefit to the children, as well as the adults, involved. These families have undoubtedly acquired a feeling of recognition and status which they never had before, as well as a feeling of security in their new surroundings which heretofore has been lacking. In those respects alone, much emotional stress and pressure has been removed from the children, as well as the parents. Given sufficient time, these environmental improvements and the psychological effects flowing therefrom will remove many of the causes of juvenile delinquency, as well as domestic disharmony. If the attitudinal changes which we have detected in these families can be accepted as criteria of their improved status, then we can definitely say that the housing projects have been eminently successful.

*Mrs. Ida S. G. Segal, Executive Director, Jewish Social Service, Newark, N. J.*

I can say that our families housed in the Projects are faring much better than they did before, and we have had no incidence of tuberculosis in our families housed in the Projects.

*Dr. Leon Moses, Principal, Cleveland Junior High School, Newark, N. J.*

May I say without reference to statistical evidences of correlation, that I am convinced that there is a direct relation between home background and pupil character, stability, conduct, and academic progress.



I believe that the pupil's home background (and I mean the whole complex of physical, social, and psychological factors tied up with domestic shelter) is distinctly related as the conditioning cause to the academic and social maturity of the pupil. I have observed that pupils who have moved from deteriorating neighborhoods to neighborhoods in better state of comfort, become more organized in mind, more stable in spirit, and more ambitious in their work.

I am, as an educator, most earnestly convinced that one of the soundest and most profitable investments that Newark can make would be in an extensive rehabilitation program.

*Margaret T. Dugan, Sergeant Policewoman, Commanding Special Service Bureau, Department of Public Safety, Newark, N. J.*

One of the contributing factors to juvenile delinquency is poor housing, as poor housing means poor environment, poor health, lack of recreational facilities.

A definite improvement has been shown in regards to juvenile delinquency, particularly in the development of the Housing Authority

*Frances B. Poindexter, Principal, South Eighth Street School, Newark, N. J.*

I am convinced that the Fuld Housing Project, in which many of our children reside, has proved a real asset to this neighborhood.

*John B. Kaiser, Librarian, The Public Library of Newark, N. J.*

Your letter was referred to the head of our Branches & Extension Department, under whom our library service to housing projects is organized and she has discussed it with the individuals serving in these library projects. Below I give the comment sent me.

"They feel that they cannot give any accurate statement on such factors as infant mortality, incidence of tuberculosis, school records, occurrence of fires, accidents, etc. They have noticed health conditions in general are greatly improved. Also, there has been a reduction in the number of cases of communicable diseases. This has shown up in overdue book cases."

*Dr. Charles V. Craster, D. P. H., Health Officer, Newark, N. J.*

The results of the various housing surveys showed there was a crying need for some long range plan of concerted action by those whose responsibility it was to safeguard the health,

morals, safety, comfort, and general welfare of our Newark citizens. If this were done there could be no grounds for civil or criminal negligence charges, should a great fire or an epidemic of disease sweep through these city plague spots.

*S. A. Ralston, Principal, Central Commercial and Technical High School, Newark, N. J.*

Certainly I am in accord with the belief of most of the school men that housing people in improved and adequate homes is a forward step in morale building. It develops self-pride which is a strong stimulus to ambition and better behavior. Better houses will help us have better homes which over a period of time will give us better citizens.

*Dr. William R. Ward, Medical Board, The Mutual Benefit Life Insurance Company, Newark, N. J.*

I think that every thoughtful and observing person recognizes the benefit of sanitary housing and a favorable environment but to what extent this condition, of itself, will decrease juvenile delinquency and lessen the prevalence of disease, time alone can tell.

It is my opinion, based upon considerable observation, that the Newark Housing Authority has rendered a very real service to our City and I trust that when the war is over that we may witness a substantial advance in the providing of adequate housing for many of our citizens who are in sad need of better homes.

Some of these persons, it should be added, were not altogether agreed that rehousing has had beneficial effects in every instance. A principal of a high school thought that in one area where a housing project was situated, juvenile delinquency had increased.

An executive of a social agency pointed out that the mingling of many children in the playgrounds of the projects might be conducive to the spread of contagious diseases. He suggested that a stigma was still attached to the people living in public housing since they are known to have come from slums. He also felt that, in regard to the children's recreation, "in spots there has been a tendency either to have little or no supervision or too much," and that further thought should be given to striking a happy medium.

Another writer thought that some of the project tenants, "... have been thrown into a new situation without a preparatory period to bridge the gap between their old and new living conditions. Many of them are not ready for such a radical change." Also, it was felt that there were too many planned activities for children, and that this might have the effect of stifling the youngsters' initiative.

## **Part Three**

### **The Rehoused And Control Groups Compared**



## The Rehoused Families

The statistical study of the criteria by which we attempted to measure the effects of public housing on the rehoused population necessitates a discussion of the population and housing characteristics of the projects and the control groups.

The three projects used in this study are for low-income families, with the exception of one half,

or 150 units in Felix Fuld Court, which are for defense workers and their families. Before the war the income limits were those shown in Schedules A through C, in Table 1 below. However, since the war, the resultant high wages and the increased number of wage-earners per family, the income limits were raised as shown in the table.

Table 1  
Annual Income Limits and Rent Schedule

Family Size	A	B	C	D	X	Admission Limits
2	Up to \$800	\$801-1,000	\$1,000-1,250	\$1,251-1,350	\$1,351-1,450	\$1,451-1,800
3-4	Up to 900	901-1,125	1,126-1,350	1,351-1,450	1,451-1,550	1,551-2,000
5 or more	Up to 1,000	1,000-1,250	1,251-1,450	1,451-1,550	1,551-1,650	1,651-2,200
Monthly Rent..... (including utilities)	\$19.	\$22.	\$25.	\$28.	\$32.	*

\*Rents for families whose incomes at admission or at the time of the annual re-examination for continued occupancy are above those in X grade are figured at \$32 plus \$1.00 for each \$50 by which the annual income exceeds the limits in X grade.

No rent may exceed the ceiling set by the Housing Authority on July 1, 1942, and approved by the Office of Price Administration. These rent ceilings are shown in Table 2 below.

Table 2  
Ceiling Rents

Rooms	Baxter and Fuld	Stephen Crane
3-3½	\$37.00	\$38.00
4-4½	42.00	43.00
5-5½	47.00	48.00

Ordinarily it would have been the policy to ask tenants exceeding the earlier income limits to move, in order to make room for other low income families living in substandard housing. However, due to the extreme housing shortage in Newark,<sup>1</sup> and the fact that there were no places for these families to move to, these income and rent adjustments were made. It was also realized that the higher incomes of many of the project families were temporary increases, and that at the termination of the war, their incomes would again probably be reduced and with it their rents.

### Rehoused Site-Residents

All of the low-income families in these projects came from substandard housing. Many of the tenants of James Baxter Terrace and some from Felix Fuld Court were site-residents who were forced to move when the projects were built. If they fulfilled the requirements of tenancy, they were given first consideration when the projects were filled. The primary requirements were that the tenant come from a substandard dwelling and have an income within the limits shown in Table 1. Substandard dwellings included such factors as overcrowding, structural defects of the buildings, lack of facilities such as heat, toilet, bath-tub, cooking, etc. The preceding case histories in Part II give specific examples of the types of dwellings from which the rehoused families came.

In filling the projects preference was given to site-residents. Table 3 shows the percentage of site-residents rehoused in the projects built on land that had been previously occupied.<sup>2</sup>

<sup>1</sup> On Dec. 1, 1943 the Newark Evening News stated that "Only one half of one percent of the Newark area's habitable dwellings are unoccupied according to a survey released today by the Bureau of Census." The situation of Negroes is especially severe. The Board of Health has found it necessary to condemn a number of dwellings occupied by Negroes as unfit for use, but no new dwellings could be found for these displaced families. The city had to renovate an old school building as a temporary shelter for these families in its new dwellings could be found.

<sup>2</sup> Mr. Cyrus Wilmore, President of the National Association of Real Estate Boards in an address given Dec. 17, 1943 in Atlantic City, N. J. stated, "I have not been able to find one project in the United States where as many as .05% of the families who formerly lived in the area moved into the new projects." As our table indicates these projects rehoused from 20% to 34% of the former site-residents.

**Table 3**  
**Site-Residents Rehoused**  
(Figures refer to families)

	Residents on Site before Project was Built	Number of Site Residents Rehoused	Percent of Site Residents Rehoused
<i>Fehr Fuld Court</i>			
White	42	1	2.4
Negro	63	20	31.7
Total	105	21	20.0
<i>James Baxter Terrace</i>			
White	125	4	3.2
Negro	300	91	30.3
Total	425	95	22.4
<i>Pennington Court</i>			
White	26	7	27.0
Negro	6	4	67.0
Total	32	11	34.0

Of the white families living on the site of Baxter Terrace before it was built, 36% owned the homes they lived in. After being paid for their property which was demolished to make way for the project, most of these families were above the income limits for public housing.

#### The Effects of the War

Before the war many of the project families were receiving public assistance, in the form of aid from the Department of Public Welfare, State Board of Children's Guardians, Old Age Assistance, etc. A number of families are still recipients of aid from these agencies. Originally only 15% of the families in the project were permitted to receive public assistance, but there were so many relief families urgently in need of better housing, that the quota was raised to 20%. Since the war,

increased employment and higher wages have made it unnecessary to have so high a percentage of families receiving public assistance, and at the present time less than 5% of the families fall into this category. These are primarily families the heads of which are widows or unemployable men.

Many families are now paying higher rents than they ever paid before. Despite the fact that they are earning much more, they object to spending so much for rent—even though it be the same or even a smaller percentage of their incomes. However, most of these families still remain in the projects because they realize that even if they were to find other dwellings, they would not have the facilities they now enjoy, such as heat, electricity, refrigeration, etc. They also recognize their higher rents as an insurance against the day when they may again only be able to pay much less. They know that at such low rents private housing can provide them only with inadequate homes, such as those from which they came.

The number of units of each size in the three projects is shown in Table 4, below.

**Table 4**  
**Number of Units by Size in Baxter Terrace, Fuld Court and Crane Village**

<i>Project</i>	<i>Number of Units</i>			
	3-rooms	4-rooms	5-rooms	Total
Baxter Terrace .....	180	321	111	612
Fuld Court . . . . .	72	156	71	299
Stephen Crane Village	136	147	71	354

There are 1,265 families, and 4,853 persons living in these three projects. Of this number approximately 560 of the families and 2,246 of the individuals are Negroes. More detailed information about each of the projects and the control groups follows.



JAMES M. BAXTER TERRACE

JAMES M. BAXTER TERRACE



ANOTHER VIEW OF BAXTER TERRACE

# James Baxter Terrace And Ward Fifteen

## Population Characteristics

This project was opened for occupancy in August, 1941 and was fully occupied by October of that year. The building of Baxter Terrace required the demolition of five blocks. "In the course of tearing down the frame hovels and firetraps which infested this site, the contractor caught and killed somewhere in the neighborhood of 60,000 rats."<sup>1</sup>

Ward Fifteen, in which this project is located, was used as the control group. Since Baxter Terrace was a slum clearance project, a number of the tenants originally came from the site, and many others came from the surrounding area, within the ward.

The project contains 612 families and approximately 2,344 people. Of this number 69% are Negroes. The population of the ward is 11,824, with 17% being Negroes. A much smaller proportion of the ward population is Negro, than in the project, but in almost all cases, our statistics were adjusted to take account of this factor. The project accounts for about 19% of the population of the ward.

In the project 41% of the population was under fifteen years. This age group constitutes only 24% of the population of the ward, and 21% of the population of the city. *This high percentage of children is typical of public housing developments, since preference is usually given to families with*

children. Our statistics were adjusted to take into account this difference in age composition between the projects and the control groups.

Of the population over fifteen years, 44% in the project were males and 56% females. In the ward the distribution was 49% males and 51% females. The greater disproportion of men to women in the projects is partially due to the fact that the project census was taken in November, 1943, whereas the ward data was taken from the 1940 census, which means that the impact of the war on the ward population had not yet taken place. Any difference in the sex ratio that may still remain between the project and the ward is probably due to the fact that the project has a larger proportion of broken families, with widowed, separated or divorced women, as the heads. Families of this type are more likely to be economically dependent and thus forced to live in inferior housing—the kind of housing from which the tenants came.

Thirty-one percent of the families living in Baxter Terrace are white, and of these the greater proportion are of Italian descent. In the ward, 53% of the 2,414 foreign born white persons came from Italy.

Table 5 which follows, gives the age, sex and color of the populations of Baxter Terrace and Ward Fifteen.

Table 5  
Comparison of the Population Composition of Baxter Terrace and Ward Fifteen, by Age, Sex and Color<sup>2</sup>

Age	Baxter Terrace				Ward Fifteen			
	Total No.	%	% Male	% Female	Total No.	%	% Male	% Female
Under 5	416		49	51	761		51	49
5-14	556		53	47	2,092		50	50
15-24	353		41	59	2,380		49	51
25-34	474		43	57	1,926		49	51
35 and over	545		48	52	4,665		49	51
Under 15	972	41	52	48	2,853	24	50	50
15 and over	1,372	59	44	56	8,971	76	49	51
Total	2,344	100	47	53	11,824	100	49	51
White	726	31	43	52	9,844	83	50	50
Negro <sup>3</sup>	1,618	69	47	53	1,980	17	48	52

<sup>1</sup> *Survey of the Public Housing Projects*, Sponsored by the Newark Housing Authority. Prepared by the Essex County Building & Loan League Committee, 1940, p. 5.

<sup>2</sup> All population figures for the wards, in this and Tables 8 and 9 were taken from the 16th Census of the United States, 1940, Population, Vol. 2, *Characteristics of the Population*, Part 4.

<sup>3</sup> The Negro figures for the ward in this and Tables 8 and 9 include a few non-white persons other than Negroes.



## Housing Characteristics of Ward Fifteen

The housing characteristics of this and the other wards included in this study, are shown in Table 10 on page 40. The figures, taken from the 1940 Census, represent the situation in the ward before the project was erected.

Rent is one of the best indices we have of the economic status of a group. The average monthly rental in the ward was \$23.71. Sixty-nine percent of the families in the ward paid \$25 or less per month for their homes. Eighty-five percent paid \$30 or less. The average rent in this area is almost \$10 less per month than the average of \$33.36 for the city.

The average monthly rental paid by the sample of tenants we interviewed from Baxter Terrace, was \$23.34 before they moved into the project. After moving into the project the average monthly rent for these families was reduced to \$21.35. This latter rental includes utilities, whereas in the majority of the cases the higher rent paid before moving into the project did not. The average monthly rent for all the families in this project was \$20.05 in October, 1941.

Forty-five percent of the dwelling units in this ward were in need of major repairs or had no private bath; 33% being in need of major repairs and 30% having no private bath. Using an index of 1.51 or more persons per room, 7% of the dwelling units were overcrowded. Nineteen percent of the dwelling units were occupied by non-white persons.

Compared with the average for the city, this ward contains a greater percentage of dwelling units that are substandard in terms of overcrowding or need of major repairs and lack of a private bath.

The Orange and Nesbitt Streets site, on which James Baxter Terrace is located was one of the worst slums in Newark. "In 45 surrounding blocks 58 percent of the 650 residential structures required major repairs or were unfit for use. The 1,578 dwelling units, occupied by both white and Negro families were deficient in all the utilities. There were no bathtubs in 998 of the flats, no hot water in 900, and only 124 had central heating. Toilets for 315 of the units were out of doors."<sup>1</sup>

In a study by the Board of Education in 1941,<sup>2</sup> each ward in the city was given a score on the basis of "home conditions and general physical environment of the neighborhood." This score was based on the items listed below, and weighed as indicated.

<u>Items</u>	<u>Weight</u>
1. Home in bad condition	3
2. Homes without hot water	4
3. Homes without bathtub or shower	3
4. Overcrowding (more than 1 person per room)	3
5. Homes without private water closet	5
6. Homes without electric light	2
7. Homes without gas for cooking	1
8. Homes without mechanical refrigeration	1
9. Population density	1
10. Incidence of tuberculosis	4
11. Median rent paid for home (reversed)	2
12. Homes occupied by owners (reversed)	1
13. Single family houses (reversed)	2
14. Houses constructed since 1924 (reversed)	1
15. Number of automobiles per family (reversed)	1

The ward was judged to be superior, good, fair, etc. on the basis of its score, which was classified as follows:<sup>3</sup>

<u>Class</u>	<u>Score</u>
Superior	10 - 27
Good	28 - 44
Fair	45 - 62
Poor	63 - 89
Very Poor	90 - 125
Inferior	126 - 180

Ward Fifteen had a score of 78 which classifies it as a "poor" environment. The range of scores for the sixteen wards in the city was from 46 to 117.

These facts indicate that this ward is fairly typical of the type of housing situation from which the families of James Baxter Terrace came. If there is any discrepancy it is in favor of the ward, which on the average, has a better type of dwelling than that from which the project families came. Our previous case histories indicate this.

<sup>1</sup> Housing Authority of the City of Newark, Report of Progress, 1940, Writers' Project of New Jersey, W. P. A.

<sup>2</sup> Social Trends and the Schools, Department of Reference and Research, Board of Education, Newark, N. J. 1941, p. 40

<sup>3</sup> Ibid., p. 43



FELIX FULD COURT

FELIX FULD COURT



CHILDREN PLAYING IN THE COURT OF FELIX FULD

# Felix Fuld Court And Ward Three

## Population Characteristics

This project was opened for occupancy in January, 1942 and was fully occupied by May of that year. One-half of the project, or 150 dwelling units are devoted to low-income families, and the other 150 units are occupied by war workers and their families.

The control group for Fuld Court is Ward Three. Since one-half of the project is devoted to the families of war workers, and it was known from a previous study<sup>1</sup> that many of the city's war workers were migrants, we thought this might in-

validate comparisons with the ward. An investigation revealed that 18% of the families in the project were migrants, but that over one-half of these 38 families came from New Jersey, and communities close to Newark.

In a census tract neighboring the one in which the project is located (Tract 66), it was found that of 490 families visited, 84 or 18% were migrants. This indicated that the percentage of migrants in Fuld Court was no greater than in the surrounding area thus making comparisons between the two valid. Table 6 gives the data on migrants in Fuld Court.

Table 6  
Migrant Families in Felix Fuld Court, October, 1943

	Families in Project	Families with War Workers	Families which Migrated	% of Migrant Families among the War Workers	% of Migrant Families among all Tenants
White	149	71	26	37	17
Negro	150	48	12	25	8
Total	299	119	38	32	18

Table 7 gives the origin of the migrant families in Fuld Court, and shows that most of them came from New Jersey.

Table 7

## Origin of Migrant Families in Felix Fuld Court

State	White	Negro
N. J.	10	10
N. Y.	9	2
Pa.	7	0
Total 26	12	

Fuld Court is occupied by 299 families and approximately 1,198 persons. Of this number 41% are under fifteen years, whereas in the ward this age group constitutes 23% of the population.

Of the adult population in the project 45% are

males and 55% females, whereas in the ward there are 48% males and 52% females. This difference in the sex ratio between the two groups is due, as indicated previously, to the facts (1) that the ward census was taken before the war whereas the project census was taken in 1943 and (2) that the project has a greater percentage of broken families without fathers. Fuld Court constitutes 5% of the population of the ward.

Forty-eight percent of the project consists of Negroes, and in the ward they contribute 63% of the population. A large percentage of the white families in the project are Jewish. There are also a large number of Jewish families in the ward. We have no exact figures on religious affiliation. We do know that of the 4,839 foreign born white persons in Ward Three 29% came from Russia and 24% from Poland.

Table 8  
Comparison of the Population Composition of Fuld Court and Ward Three, by Age, Sex and Color

Age	Felix Fuld Court				Ward Three			
	Total No.	%	% Male	% Female	Total No.	%	% Male	% Female
Under 5	196		53	47	1,790		51	49
5-14	299		48	52	4,239		49	51
15-24	194		38	62	4,561		47	53
25-34	247		45	55	4,892		46	54
35 and over	262		49	51	10,391		50	50
Under 15	495	41	50	50	6,029	23	50	50
15 and over	703	59	45	55	19,834	77	48	52
Total	1,198	100	47	53	25,863	100	49	51
White	570	52	49	51	9,478	37	50	50
Negro	628	48	45	55	16,385	63	48	52

<sup>1</sup> Migrant War Workers in Newark. Newark Housing Authority, 1944.

### Housing Characteristics

The site of Fuld Court was previously occupied by a lumber yard, a junk yard, an auto sales lot, and a number of deteriorated dwellings. About 25% of the site was occupied by dwellings and about 20% of the tenants of these dwellings became residents of the project. Many others in the project came from the surrounding area in the ward.

Ward Three represents one of the worst slums of the city, and is the center of much of the community's delinquency, crime, illness, and other undesirable social conditions. The housing characteristics of the ward, as of 1940, before the project was built, are shown in Table 10 on Page 40. The average monthly rent in the ward was \$23.96 with 66% of the families paying under \$26. Only 10% of the dwelling units in the ward drew a monthly rental of over \$30. The average monthly rent for the ward is about \$10 less than the average for the city.

For the sample of families from Fuld Court whose interviews were presented in the preceding

section, the average monthly rent before moving into the project was \$23.16. After moving into the project this monthly rent was reduced to \$20.84, with this latter rental including utilities.

Fifty-four percent of the dwellings in the ward were in need of major repairs or had no private bath, 38% being in need of major repairs and 35% having no private bath. Using an index of 1.51 or more persons per room, 7% of the dwelling units were overcrowded.

Compared with the city as a whole this area is decidedly inferior in the condition of the dwelling units. Twenty-three percent more of the houses in the ward than in the city, possessed substandard factors, that is, needed major repairs, or had no private bath. The amount of overcrowding is also greater than the average for the city. The housing in Ward Three is typical of the dwellings from which the residents of Fuld Court came.

In the study by the Board of Education referred to above, the score of the Third Ward was 97. This indicated it to be a "very poor" area, and, in fact, it was next to the worst ward in the city.



STEPHEN CRANE VILLAGE

STEPHEN CRANE VILLAGE



TENDING THE LAWN AT STEPHEN CRANE

# Stephen Crane Village And Ward One

## Selecting A Control Group

This project was opened for occupancy in January, 1941 and was fully occupied by April of that year. The selection of a control group for Stephen Village presented a more difficult problem than did the other two projects. This project was erected on vacant land on the outer fringe of the city. It is located in Ward Eight, which as Table 10 shows, is a superior area in terms of housing.

The average monthly rental in Ward Eight was about \$8 higher than the average for the city, and about \$18 higher than the average for the Third and Fifteenth Wards. There was less overcrowding than the average for the city and 10% less of the dwelling units needed major repairs or lacked private baths.

Since all of the tenants in Crane Village are in the low-income category and were removed from substandard housing, it was obvious that the Eighth Ward, in which the project was located, did not represent the type of housing from which those people came. Therefore comparison with this ward would not be valid nor could it bring out the fact with which this study is concerned—the effects of improved housing.

In order to locate an area that would represent the previous situation of the rehoused families, a spot map was made showing the residence of every family in the project before moving to Crane

Village.<sup>1</sup> This map showed several points of concentration, but the majority came from the First Ward, and especially from Census Tracts 88 and 90 in this ward. Ward One was therefore used as the control group for this project.

## Population Characteristics

Crane Village contains 354 families and about 1,311 people. In the ward there are 25,813 people. In this project also we found a much higher percentage of children than in the ward. Almost half of the project, or 45% consisted of persons under 15 years, whereas in the ward 26% of the population was under 15 years.

Among the adults in this project as in the other two projects there is a greater proportion of females to males than in the control group. In Crane Village, of the population over 15 years, 46% are males and 54% females whereas in the ward the adult population consists of 50% males and 50% females. This difference in the sex ratio between the two groups has been previously accounted for.

The greatest percentage of persons in this project are of Italian descent, and in the control group, of the 6,929 foreign born white persons 83% came from Italy. Crane Village contains only white families. In ward One 6% of the population were Negroes.

Table 9 gives the age, sex and color of the populations of Crane Village and Ward One.

Table 9  
Comparison of the Population Composition of Crane Village and Ward One, by Age, Sex and Color

Crane Village					Ward One				
Age	Total No.	%	% Male	% Female	Total No.	%	% Male	% Female	
Under 5	236		53	47	1,825		52	48	
5-14	356		52	48	4,946		50	50	
15-24	119		45	55	5,788		49	51	
25-34	296		43	57	4,456		47	53	
35 and over	804		49	51	8,848		52	48	
Under 15	592	45	52	48	6,771	26	50	50	
15 and over	719	55	46	54	19,042	74	50	50	
Total	1,311	100	49	51	25,813	100	50	50	
White	1,311	100	49	51	24,269	94	50	50	
Negro	—	—	—	—	1,544	6	51	49	

<sup>1</sup> This is a contradiction to Mr. Wilmore's statement in the address previously referred to, that "Housing Authorities keep their records as to where their occupants came from a closely guarded secret." Anyone familiar with the city, looking at that map, would immediately see that the residents of the project came from the worst housing areas of the city. In fact, the appearance on the map of a resident from one of the city's better neighborhoods, Richelieu, resident of Richelieu Terrace was a nurse who roomed at that address, sleeping on a cot in the living room. Her two children were being taken care of by an aunt in another city. The admittance of this group into the project made possible the re-establishment of the family.



## Housing Characteristics

The housing characteristics of Ward One, as of 1940, are summarized in Table 10 below. The average monthly rental for Ward One was \$23.78 as compared with the \$41.84 for Ward Eight, and \$38.36 for the city. Sixty-two percent of the families in Ward One paid \$25 or less per month for rent, and 82% paid \$30 or less. The average monthly rent was almost \$10 less than the average for the city.

The average monthly rent paid by the sample of tenants we interviewed from Crane Village was \$25.27 before they moved into the project. The average rent in the whole project on April 1, 1941, was \$24.86 with all of the tenants paying \$25 or less per month. Although the average rent was \$.58 more per month in the project than the average in the ward, it must be remembered that the project rent includes heat, refrigeration, and gas and electricity, whereas the rent in the ward does not.

Fifty-seven percent of the dwelling units in the ward were in need of major repairs or had no private baths, as compared to 31% of the city and the 21% of Ward Eight. Fifteen percent of the dwelling units were overcrowded as compared with 5% of the city as a whole. The Board of Education's environmental score for this ward was 78, which placed it in the category of "poor" in its housing and environmental conditions.

Control groups as large as the wards were used because much data was already available for these

groups. Although in studying certain indices it may have been preferable to use smaller, more carefully matched areas, we did not have the time or personnel necessary to gather the material for smaller areas, when it was available by wards. However, in two instances, in order to see how it would affect the results, comparisons were made not only with the ward, but with a smaller, more homogeneous area, within the ward.

In studying birth rates three blocks from Census Tract 88 in Ward One were selected. This is an area from which a number of families from the project came, and it represented the type of housing from which most of the project residents came. The housing conditions in this area are very bad, 79% of the dwelling units needing major repairs or having no private bath. Twenty-three percent of the dwelling units were overcrowded as compared with the city average of 5%. There were no non-white families living in the 264 dwelling units in this area. The average rental was \$18.08.

In studying tuberculosis Census Tract 90 in Ward One was used. This tract consists of seven occupied blocks (a park occupied a large part of the tract). This tract was adjacent to Tract 88, discussed above, and had the same type of housing conditions. Many of the residents of Crane Village came from this tract also. The average rent here was \$17.30, and 5% of the dwelling units were occupied by non-white families. Twenty-four percent of the dwellings were overcrowded, and 76% were in need of major repairs or had no private bath.

Table 10

### Housing Characteristics of Wards 1, 3, 8, 15, and the City of Newark\*

Area	Total Structures	Total Dwelling Units	% Owner Occupied	% Tenant Occupied	% Vacant	% Overcrowded (\$31 or more per room)	% Needing Major Repairs or No Private Bath	% Occupied by non-White	Avg Monthly Rent
Ward 1	2,202	6,393	14	82	4	15	57	7	\$23.78
8	2,034	7,226	4	93	3	7	54	63	23.96
8	5,052	11,597	21	74	5	6	21	5	41.84
15	1,221	3,176	15	81	4	7	45	19	23.71
City	45,679	116,757	17	79	4	5	31	11	38.36

\* Source: 1940 Census of the United States, 1940 Housing Unit Series Data on Small Areas, New Jersey

## A TYPICAL PROJECT POPULATION

A detailed analysis of the tenantry of the first project opened in Newark, Pennington Court, was available. Since the population of this project is typical of that in the projects we studied, and for which this information is not available, we are summarizing this material briefly.

Of the dwellings previously occupied by the project tenants, 72.4% needed major repairs, 65.3% had no inside private bath, 43% had no inside private flush toilet, 19.7% had no cooking facilities with sink, 53.1% had no adequate and safe heating and 39.9% had no natural light and adequate ventilation.

Thirteen percent of the dwellings had five deficiencies, 20.6% had four deficiencies, 27.2% had three, 9.6% had two, and 11% had one deficiency. Twenty-four percent of the dwellings were overcrowded.

In 1941, 71% of the families in the project had an annual income of less than \$1,400, and the average income was \$1,070. Eighty-eight percent of the tenants paid a monthly rent of under \$25. The average monthly rent, including utilities, was \$23.47, which represented about 25% of the average income. The average monthly rent plus utilities in their previous quarters had been \$24.19, which represented about 29% of the average income.

The largest occupation groups were, semi-skilled workers 43%, and unskilled workers 22%, domestic workers, skilled workers, and clerks made up the balance. Fifteen percent of the residents were receiving relief (including WPA), pensions, etc.

## CONCLUSION

Whereas 72% of the previous dwellings of the Pennington Court tenants had needed major repairs, of the control groups, none had higher than 57% of its dwellings in need of major repairs or with no private bath. This indicates that if our control and rehoused groups are unequally matched as to housing conditions, the superiority lies in the ward as compared with the dwellings from which the project residents came. Therefore, in the comparisons between the projects and the wards, if there is a bias it is in favor of the wards.

It should be kept in mind that in comparing the projects and the wards, the implication is that the conditions found in the wards, are likely to have existed among the rehoused families also, if they had not been rehoused.

Before closing the question of the comparability of the rehoused and control groups, it is appropriate to comment on the selective process that is likely to operate in the consideration of applicants

for residence in the housing projects. This selection would seem to be based on; the appearance and personality of the applicants, their health and housekeeping habits, the regularity of employment, the stability of family life, and finally their reliability, especially with regard to the payment of rent.

An accurate evaluation of this selective process, and of the extent to which it affects our comparisons is a difficult matter. Much of this selection is of a subjective nature, depending to a large extent on the appraisal of the applicant by the tenant selection staff. This appraisal is undoubtedly influenced by such intangibles as personality, appearance, and the total impression made by the applicant. However, there is very little area for the operation of these personal factors, since there are fixed standards of tenant selection which must be adhered to such as the requirements that applicants come from substandard housing and be within definite income limits, and that those with the greatest need be served first.

In the matter of health we have elsewhere shown that bad health, where it is of such a nature that it might be benefited by good housing, would give the applicant a preferential rating. As for housekeeping habits, only *extremely* poor housekeeping would cause the rejection of an applicant, and then, only if it was clear that such habits were independent of the poor housing and lack of facilities. If it seems that the applicant would respond favorably to a better housing environment, he would not be rejected.

Concerning stability of family life, our data seems to indicate that there are more broken families in the project population than in the general population. As far as stability of employment is concerned, prior to the war, as large or even a larger percentage of the project families received public assistance than was the case generally in the population of the community.

With regard to the reliability of the applicant in the payment of rent, this undoubtedly is an item that has selective implications. But, its significance is difficult to establish. However, it is unlikely that this factor would distort our comparisons to any extent.

It has been suggested that merely by their residence in the projects, the families living there indicate greater initiative and interest in raising their standards of living, than those of similar status living outside of the projects. However, the Housing Authority has thousands of applications from families it has not been able to accommodate. These families, although they live outside of the projects, have shown the same initiative.



## **Part Four**

### **Statistical Analysis Of The Effects Of Rehousing**



## Some Comments On The Statistical Analysis

The population figures used in determining the rates presented in the following chapters were taken from the 1942 and 1948 reports of the Newark Health Department. These figures differ from the population figures given in Part III, since the latter were taken from the 1940 Census Report which gave the age and sex breakdown of the ward populations. When the rates were adjusted for particular sex and age groups, the percentage of persons of each race in that sex and age group was determined for each ward, from the 1940 Census figures. This percentage was then applied to the Health Department's population estimate for the ward, which is given by race only.

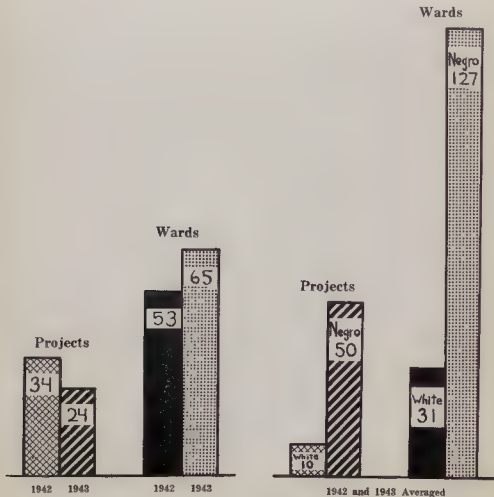
Two of the projects we studied, Baxter Terrace and Fuld Court, are in the wards to which they are compared. Therefore, it was necessary, in order to make the comparison between the project and the ward clear, to deduct the project popula-

tion from the ward population, and the number of cases of births, infant deaths, etc., in the project from the number in the ward as a whole. The significance of the difference between the rates for the projects and the wards was tested through the use of chi square.

It should be noted that the rates are based on population estimates and their accuracy is therefore dependent upon the accuracy of these estimates. And, also, that the small number of cases in the study of certain indices may be inadequate from a statistical point of view. The short time of two years, which our study covers, is not sufficient for conclusive generalizations. But, as we stated previously, our data supports the assumption that the benefits derived from rehousing families in healthful homes, would be even greater over a longer period of time.

# TUBERCULOSIS-MORBIDITY RATES

Per 10,000 persons 15 to 40 years



# Tuberculosis

The number of new cases of tuberculosis in the projects and in the comparable areas was obtained from the Tuberculosis Division of the Department of Health. We dealt with new cases only because the influence of improved housing would not be seen if the figures included cases of tuberculosis contracted before persons moved into the projects.

It is again necessary to stress the fact that in making comparisons of the kind that follow, it is essential to eliminate any selective factors that may be operating in favor of the experimental or rehoused group. It has been suggested that our comparisons are invalid because in the process of tenant selection, infected and ill persons would be weeded out, naturally tending to give the projects a superior health record. However, this objection is not well taken, as it is a policy of tenant selection to give preference to those applicants who in addition to meeting the other requirements such as income limitation and substandard housing, also have a health need. If two eligible families with equally great housing needs are considered for an available apartment, the one with the greatest health need would be given preference.

Since it is known that tuberculosis occurs most frequently in certain age groups, adjusted rates were calculated. In *The Social and Economic Aspects of Tuberculosis*, it is stated that "The most dangerous age period for actual development of pulmonary tuberculosis is between the ages of 16 and 30 years." Our figures include all forms of tuberculosis and two sets of rates were compiled, the first based on the total population, and the second, on the population 15-40 years.

## Other Studies on Tuberculosis

Tuberculosis "is admittedly a disease of poverty."<sup>1</sup> In 1941 a study was made of the relationship between mortality from tuberculosis and the amount of rent paid. "... where the monthly rental was from \$10.00 to \$20.00, the tuberculosis rate was five times the rate where the monthly rental was \$55.00 or more."<sup>2</sup>

Besides the cost in time lost, the financial cost of tuberculosis is tremendous. In New York State, it was computed that the average total cost of each tuberculosis case in the care of the state was about \$10,000.<sup>3</sup>

"The Philadelphia Health Council found that 30 percent of the 22 families studied had a tuber-

culosis problem as the immediate cause of their relief situation."<sup>4</sup> Obviously a reduction in the tuberculosis rate in the community means a reduction in its relief load.

Bad housing is one factor in the complex of poverty, ignorance, inadequate diet and lack of medical care, all of which affect health. From the slums of Hartford, Connecticut, which housed one-fourth of the city's population, came over one-half or 51% of the city's tuberculosis cases.<sup>5</sup> In the Detroit slums the tuberculosis death rate was found to be six and a half times the rate of the city as a whole.<sup>7</sup>

In Newark an investigation in 1934 showed that in the downtown section, an industrial area of inferior housing, the tuberculosis death rate per 10,000 persons was 20 as compared with 9 for the city.<sup>8</sup>

In thirteen slum areas of Philadelphia the case rate of tuberculosis per 1,000 of the population in 1934 was 12.25 as compared with 7.68 for the city, and in one area it was as high as 21.28.<sup>9</sup> A recent study made by the Philadelphia Housing Authority indicated that the tuberculosis death rate per 10,000 persons was 5.98 for the city and 3.4 for the three housing projects studied. The rate for the housing projects was 43% lower than the city rate.<sup>10</sup>

## Tuberculosis Among the Negroes

We found, as have many before us, that the tuberculosis morbidity rate was much higher among the Negroes than among the white population. It is true that "The Negro race occupies our lowest economic stratum with concomitant overcrowding and poor housing, inadequate medical care, malnutrition and lack of education."<sup>11</sup> This would partially explain the difference, but in our study the housing and economic conditions of both rehoused groups, Negro and white, were pretty much the same, and nevertheless a differential remained. The explanation most likely lies in selection and immunization. Tuberculosis is essentially an urban disease. Its ravages among the white urban population have resulted over many generations in the elimination of those most susceptible to it, and in a partial immunity. The Negro population, however, has only become urbanized recently and every year Negro migrants flock to the cities where they live under the most miserable conditions.<sup>12</sup>

<sup>1</sup> Jersey Bureau of Publications, Teachers College, Columbia University, N. Y., 1942, p. 98.

<sup>2</sup> *Homeless Families and Families of Low Income*, 1944.

<sup>3</sup> *Homes for War Workers and Families of Low Income*, The Philadelphia Housing Authority 1943, p. 14.

<sup>4</sup> Lees op. cit. p. 19.

<sup>5</sup> There is at of every four American Negroes are now living in industrial towns and cities, according to Harry L. Bissess in "A Place to Lay Your Head," *The Commonwealth*, Dec. 31, 1943.

<sup>1</sup> H. D. Lees, M. D., prepared with the co-operation of the National Tuberculosis Association, no date p. 21.

<sup>2</sup> Lees, op. cit., p. 19.

<sup>3</sup> Ibid., p. 16.

<sup>4</sup> " p. 17.

<sup>5</sup> " p. 20.

<sup>6</sup> " p. 18.

<sup>7</sup> *Survey of the Public Housing Projects*, op. cit., p. 5.

<sup>8</sup> *The Report of a Survey of the Public Schools of Newark*, New



In addition, tuberculosis is a disease spread by contact, and although the rehoused Negroes have a lower rate than the control group, it is still higher than that of the white population in the project, probably because of their numerous contacts with other Negroes who still have a very high incidence of the disease.

The 1942 report of the Newark Health Department states, "Greater effort must be made to combat this disease (tuberculosis) among Negroes. The causes are of course difficult to overcome as they are mainly bad housing and overcrowding to which Negroes must submit, as well as much lower income levels." The Negroes in the city contributed 40% of all tuberculosis deaths although they constitute only 11% of the city's population. Our rates show that the incidence of tuberculosis among the Negroes was greatly reduced by providing them with adequate housing at rents they could afford.

### Tuberculosis in the Projects and the Wards

The tables giving the tuberculosis rates for the projects and the comparable areas, are at the end of this chapter. Table 11 gives the rates per 10,000 of the population and Table 12 gives the adjusted rates, per 10,000 persons 15 to 40.

In Baxter Terrace in 1942 the adjusted rate for the white population was higher than the rate in the ward, but for the Negroes the rate was lower than in the ward. In 1943 there were no cases of tuberculosis among the white residents of Baxter compared to the rate of 26.3 in the ward. The rate for the Negroes in the project was 28.5 whereas in the ward the rate was 45.4.

The rates for Fuld Court were lower than those in Ward Three for both years. There were no cases reported among the white population of the project in 1942 or 1943, and in both years the Negroes in Fuld Court had lower rates than the Negroes in the ward. For the two years averaged the adjusted rate for the white population in the ward was 64.6 as compared to zero for the project; for the Negroes, the project rate was 102.4 and the ward rate 136.6.

Crane Village was compared with Ward One, and with Census Tract 90 in that ward. The comparison of the project with the census tract is more reliable than the comparison with the whole of Ward One, since the tract consists of a small area (seven occupied blocks) typical of the type of housing from which the residents of Crane Village came. In fact, a number of them did come from this exact area.

In 1942 and 1943 there were no cases of tuberculosis reported in Crane Village. Compared with

Census Tract 90 and Ward One, this is an excellent record. For 1942 and 1943 averaged, the adjusted rate for the project was zero, for the tract 32.3, and for the ward 19.7. The rate for the ward as a whole is lower than that for the census tract. This fact is important because it supports the hypothesis that comparisons between the projects and smaller, more carefully matched control groups than are the wards, such as census tracts, would make the differences between the projects and the control groups even more striking. Unfortunately, lack of time and personnel made it impossible to get the data for these small areas, and therefore the more accessible information for the wards had to be used. But this fact should be borne in mind when noting the differences between the projects and the wards, in all of the indices studied.

The rates combined for the three projects were lower both years than the rates combined for the wards, for both the white and the Negro populations. The combined rate for wards went up from 1942 to 1943 whereas it decreased for the projects. It is particularly interesting to note that the combined rate for the Negroes in the projects is less than half the Negro rate in the wards for both years. This seems to indicate that given healthful living conditions the notoriously high tuberculosis rates among the Negroes can be very significantly reduced.

The rates combined for the three projects were also lower than the rates for the city as a whole for both the white and Negro populations.

### Summary

1. In 1942 and 1943 the difference between the rates for the total populations of the three projects combined and the three wards combined, was not large enough to be considered statistically significant.
2. For both the white and Negro populations, the combined rate averaged for 1942 and 1943 was lower in the projects than in the wards, or in the city as a whole.
3. It has been estimated that the average cost to the community of a tuberculosis case is about \$5,000. If the rate of tuberculosis in the three wards was reduced to that in the housing projects, there would have been half as many cases each year, or 81 instead of 163. The saving to the community would have amounted to about \$410,000 just for the three wards studied. Of course, the financial loss involved is only one aspect of the situation the suffering and unhappiness involved in such illness cannot be translated into dollars.

Table 11

Tuberculosis Morbidity Rates, per 10,000 Persons in the Projects,  
Wards and the City

Area	Rates		Cases		Population	
	1942	1943	1942-43 averaged	1942	1943	1942-43 averaged
<i>Total Population</i>						
Baxter Terrace	17.1	8.5	12.8	4	2	2,844
Fuld Court	25.0	25.0	25.0	3	3	1,198
Crane Village	0	0	0	0	0	1,311
<b>3 PROJECTS</b>	<b>14.4</b>	<b>10.3</b>	<b>12.4</b>	<b>7</b>	<b>5</b>	<b>4,853</b>
Ward 15	17.8	13.5	15.7	19	13	10,656
" 3	43.5	56.0	49.8	108	129	24,802
" 1	7.7	10.0	8.9	20	27	26,000
<b>3 WARDS</b>	<b>23.9</b>	<b>29.1</b>	<b>26.5</b>	<b>147</b>	<b>179</b>	<b>61,458</b>
<i>White Population</i>						
Baxter Terrace	27.5	0	13.8	2	0	726
Fuld Court	0	0	0	0	0	570
Crane Village	0	0	0	0	0	1,311
<b>3 PROJECTS</b>	<b>7.7</b>	<b>0</b>	<b>3.9</b>	<b>2</b>	<b>0</b>	<b>2,607</b>
Ward 15	17.1	11.9	14.5	15	10	8,774
" 3	23.1	30.8	27.0	25	26	10,830
" 1	6.9	9.0	8.0	17	23	24,500
<b>3 WARDS</b>	<b>12.9</b>	<b>13.9</b>	<b>13.4</b>	<b>57</b>	<b>59</b>	<b>44,104</b>
<i>Negro Population</i>						
Baxter Terrace	12.4	12.4	12.4	2	2	1,618
Fuld Court	47.8	47.8	47.8	3	3	628
<b>2 PROJECTS</b>	<b>22.3</b>	<b>22.3</b>	<b>22.3</b>	<b>5</b>	<b>5</b>	<b>2,246</b>
Ward 15	21.3	23.4	22.4	4	3	1,882
" 3	59.4	69.0	64.2	83	113	13,972
<b>2 WARDS</b>	<b>54.9</b>	<b>65.7</b>	<b>60.3</b>	<b>87</b>	<b>116</b>	<b>15,854</b>
Census Tract 90	19.3	9.7	14.5	8	4	4,144
City Total*	15.7	16.0	15.9	674	705	429,000
City—White	12.3	11.8	12.1	474	464	384,000
City—Negro	48.3	48.1	48.2	195	231	45,000

\* The total for the city includes a few Asiatic cases and therefore adds up to more than the total of the white and Negro cases.

Table 12

Tuberculosis Morbidity Rates, per 10,000 Persons 15 to 40 Years in the Projects, Wards and the City

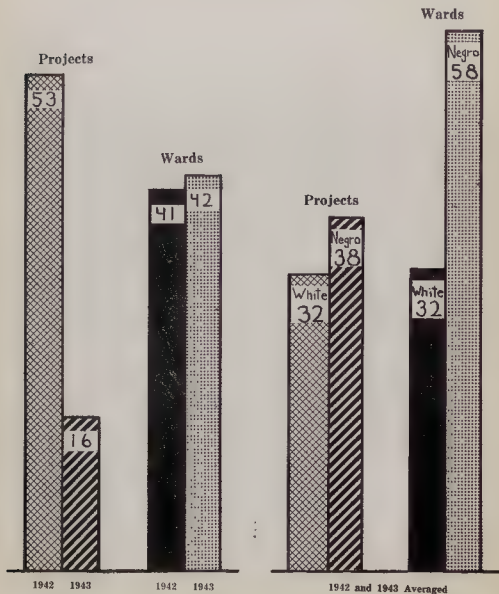
Area	Rates			Cases		Population	
	1942	1943	1942-43 averaged	1942	1943	1942	1943
Total Population							
Baxter Terrace	40.4	20.2	30.3	4	2	990	990
Fuld Court	56.5	56.5	56.5	3	3	531	531
Crane Village	0	0	0	0	0	535	535
3 PROJECTS	34.0	24.3	29.2	7	5	2,056	2,056
Ward 15	39.1	29.5	34.3	19	13	4,860	4,410
" 3	96.7	124.5	110.6	108	139	11,169	11,169
" 1	17.1	22.2	19.7	20	27	11,700	12,150
3 WARDS	53.00	64.6	58.8	147	179	27,729	27,729
White Population							
Baxter Terrace	69.4	0	34.7	2	0	238	238
Fuld Court	0	0	0	0	0	238	238
Crane Village	0	0	0	0	0	535	535
3 PROJECTS	18.9	0	9.5	2	0	1,061	1,061
Ward 15	37.7	26.3	32.0	15	10	3,977	3,809
" 3	54.3	74.9	64.6	25	26	4,600	3,472
" 1	17.0	20.0	18.5	17	23	10,025	11,475
3 WARDS	30.6	31.5	31.1	57	59	18,602	18,756
Negro Population							
Baxter Terrace	28.5	28.5	28.5	2	2	702	702
Fuld Court	102.4	102.4	102.4	3	3	293	293
2 PROJECTS	50.3	50.3	50.3	5	5	995	995
Ward 15	42.4	45.4	43.9	4	3	943	661
" 3	126.4	146.8	136.6	83	113	6,569	7,697
2 WARDS	115.8	138.8	127.3	87	116	7,512	8,358
Census Tract 90	43.0	21.5	32.3	8	4	1,862	1,862
City Total*	34.9	35.6	35.3	674	705	193,050	198,000
City—White	27.6	26.4	27.0	474	464	171,900	175,440
City Negro	92.2	102.4	97.3	195	231	21,150	22,560

\* The total for the city includes a few Asiatic cases and therefore adds up to more than the total of the white and Negro cases



# INFANT MORTALITY RATES

Per 1,000 births



## Infant Mortality

There have been many studies of infant mortality in relation to housing. In Cleveland infant mortality in the slums was found to be five times as great in the better residential districts.<sup>1</sup> In that city infant mortality rates were found to increase as rents decreased.<sup>2</sup>

In another study of 23,000 records of births in eight cities, the Children's Bureau found that, "... the infant death rate in homes with two or more persons per room was two and a half times that in families which lived in homes with less than one person per room."<sup>3</sup>

In Glasgow, the infant mortality rate was found to go up steadily and almost proportionately as the overcrowding in the various wards.<sup>4</sup> In the years 1932-34 infant deaths in Glasgow averaged 102.3 per 1,000 births, but in Knightswood, a large housing project in that city, the rate for the same years was 49.4.<sup>5</sup>

We have the infant mortality statistics for the municipal housing estates in Birmingham, which contain about 35,000 houses occupied by the low-income families. The rates for these estates for three years (1929, 1930 and 1931), were compared with the rates for seven central wards which contain a number of slum areas. For the housing estates the infant mortality rate was 63, and for the wards it was 94.<sup>6</sup>

In Manchester in 1935 the infant mortality rate for a low-rent housing estate was 61.2 and for twelve slum areas the five-year average before clearance was 120.4.<sup>7</sup> Slum families moved to the Garden Cities of Letchworth and Welwyn, showed over a five-year period, an infant mortality rate one-half of that for England as a whole.<sup>8</sup>

Dr. Norman Macfadyen has said, "If the infants born in England and Wales were all born under Garden City conditions, it would not be unreasonable to hope that 20,000 infants would be saved every year. . . ."<sup>9</sup>

In 1934, in Newark, it was found that the infant mortality rate was 75, per 10,000 live births, in the Downtown section, and 56 for the city as a whole.<sup>10</sup>

### Factors in Infant Mortality

The subject of infant mortality is a complex one involving many factors, all of which could not be controlled in our study. Such aspects as the age of the mother, the rank of birth, whether or not the mother worked during pregnancy, and

other non-housing factors, have an important relationship to infant mortality.

In discussing the natal mortality (deaths under one month) Dr Yerushalmy<sup>11</sup> points out the relationship to the age of the mother. Mortality rates are high for young mothers (under 20 the rate was 33.5), are lowest at an optimum age (25-29 year old mothers had a rate of 26.2) and then rise again with the age of the mothers (mothers 40 and over had a rate of 48.1). This data taken from a study of New York State, excepting New York City, also indicated that the average age of all mothers bearing live infants in 1936 was 27.6.

The average maternal age (age at child birth) in the three projects was 25.7 for the period studied. Three blocks in Ward One, representing an area from which a number of Crane Village residents came, revealed an average maternal age of 25.5. This check indicates that there was slight variation in the average age of mothers in the projects and in this comparable area.

We do not have detailed data on rank of birth, which is also important in infant mortality. Dr. Yerushalmy states that, "The rate for the highest order of birth (10 and over) to mothers of oldest age groups was more than three and one-half times as high as the minimum rate which was recorded for the second births to mothers aged 25 to 29."

We do not have the rank of birth of those infants who died before reaching one year. However, we do have the average number of children in those families where there was a birth during the period of our study. This figure does not give the average rank of these births since it includes only living children. In other words, although the new child may be a fifth birth, if two children had died, the number of children was recorded as three. The average number of children in the three projects studied, in the families where there was a birth during the period of this study, was 2.6. This includes the new child. For the three blocks in Ward One, it was 2.2.

The health of the mother, and whether or not she works during her pregnancy are also important. In the project we studied in connection with education, it was found that of the 195 project children, attending the school, 61 or 31% had working mothers. Of the non-project children in the school, 32% had working mothers. Among the 195 project children, 126 families were represented, and in these families 34% of the mothers worked, whereas among the 374 families of the non-project children 110 or 29% of the mothers worked.

<sup>1</sup> *Survey of the Public Housing Projects*, op. cit., p. 5.

<sup>2</sup> *Slums and Housing*, James Ford, 1936, V. 1, p. 372.

<sup>3</sup> "Relation Between Housing and Health," Rolfe Brutton, Report 1936, *Public Health Reports*, Vol. 49, No. 44, Nov. 1934, pp. 1-2.

<sup>4</sup> *Town and Country Planning*, Gilbert and Elizabeth Glen McAllister, 1941, p. 3.

<sup>5</sup> *New Homes for Old*, William V. Reed and Elizabeth Ogg, 1940, p. 52.

<sup>6</sup> *British and American Housing*, Richard L. Reiss, 1937, p. 74.

<sup>7</sup> *Ibid.*, p. 75.

<sup>8</sup> *Survey of the Public Housing Projects*, op. cit., p. 6.

<sup>9</sup> *McAllister*, op. cit., p. 3.

<sup>10</sup> *The Report of a Survey of the Public Schools of Newark*, op. cit., p. 98.

<sup>11</sup> "The Effect of Order of Birth and Age of Parents Upon Neonatal Mortality," J. Yerushalmy, *American Sociological Review*, Vol. 3, p. 868, Dec. 1938.

Nativity of the mother is another important factor in infant mortality, as we find certain ethnic groups having a much lower infant mortality rate than others. In matching the projects and the control groups, this factor was taken into account. The projects and the control groups have the same general ethnic composition, with the exception of Baxter Terrace where 65% of the project are Negroes as compared with 17% of the ward. But, our figures are shown separately for the Negro and white populations so that this can be taken into account in making comparisons. It is known that Negroes generally have a higher infant mortality rate than the white population, yet, for the two years studied Baxter Terrace had a lower rate than did the ward, although it had a much greater percentage of Negroes.

### Infant Mortality in the Projects and in the Wards

The number of births and infant deaths (under one year), used to determine the infant mortality rates, were obtained by examining the records of the Vital Statistics Department of the Department of Health, and noting the cases occurring in the projects. The rates for the wards and for the city for 1942 and 1943 were obtained from the annual reports of the Health Department. The rates for the projects, wards and the city are given in Table 13 at the end of this chapter.

The data for Baxter Terrace shows that both in 1942 and 1943, there was not a single case of infant mortality in the project among the white population. For the total population the rate was lower in the project than in the ward for both years. For the Negro population the rate was lower in the project than in the ward for 1942, and slightly higher in 1943.

The rates for Fuld Court and Ward Three in 1942 show that the project rate was higher than that of the ward. However, in 1943 there was no case of infant mortality, among either the whites or the Negroes, in the project, whereas the rate per 1,000 births was 57.9 for the ward. The absence of any cases of infant mortality is particularly striking among the Negroes where hitherto the rate had been very high.

The rates in Crane Village for 1941 and 1942 were higher than the rates in Ward One. There

were three infant deaths in each of those years in the project. In 1941 a pair of twins died, thus accounting for two of the three deaths. In 1943 the rate was greatly reduced in the project and was lower than the rate in the ward.

In 1943, the rate for the three projects combined, for both the white and Negro populations, was lower than the rate for the city as a whole. This is important because the project residents are all in the low income group where infant mortality rates are generally high, whereas the city represents every economic level. The contrast is especially great between the rate for the Negroes in the projects and in the city. For the projects it is 17.9 compared to 59.5 for the city.

### Summary

1. In 1942 the combined ward rate was lower than the combined project rate. However, this difference was not statistically significant. In 1943 the projects had a lower rate than the wards but the difference was again not statistically significant.
2. In each of the projects, the rate greatly decreased from 1942 to 1943, whereas in two of the three wards it increased.
3. In 1943 in every case, the rates for the projects were lower than those for the control groups, with the exception of the rate for the Negroes in Baxter which was slightly higher than the Negro rate for the comparable ward.
4. The combined projects had a higher rate than the combined wards in 1942, but in 1943 the rate in the projects was less than one-half of that in the wards.
5. In 1943 the rate in the projects for both the whites and the Negroes was lower than that for the city as a whole.
6. If the infant mortality rate in the wards had been as low as that in the projects for the two years, there would have been 41 infant deaths per year, instead of 50, in the three wards studied. In 1943 if the rate had been the same in the wards as in the projects, there would have been 20 cases instead of 52.

<sup>1</sup> The rates for 1941 are not in the table. For the project it was 81.1 and for the ward 24.6.

Table 13

Infant Mortality Rates, per 1,000 Births, by Color, in the Projects, Wards, and the City

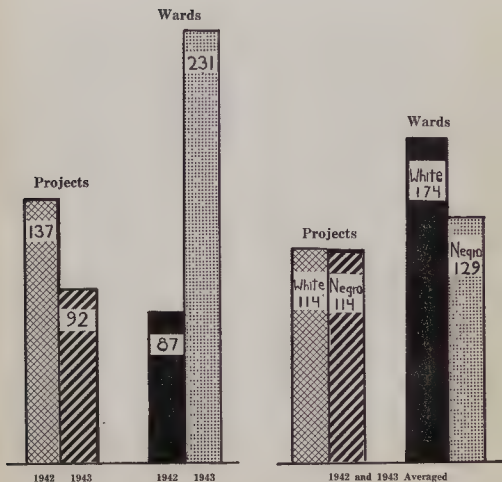
Area	Rates			Deaths		Births	
	1942	1943	1942-43 averaged	1942	1943	1942	1943
Total Population							
Baxter Terrace	41.7	18.5	30.1	3	1	72	54
Fuld Court	58.8	0	29.4	2	0	84	31
Crane Village	66.7	26.3	46.5	8	1	45	38
3 PROJECTS	53.0	16.3	34.7	8	2	151	123
Ward 15	48.1	22.1	35.1	9	5	187	226
" 3	49.0	57.9	58.9	27	32	541	553
" 1	26.4	33.4	29.9	12	15	455	448
3 WARDS	40.6	42.4	41.5	48	52	1,183	1,227
White Population							
Baxter Terrace	0	0	0	0	0	19	20
Fuld Court	55.6	0	27.8	1	0	18	9
Crane Village	66.7	26.3	46.5	3	1	45	38
3 PROJECTS	48.8	14.9	31.9	4	1	82	67
Ward 15	45.2	21.1	33.2	7	4	155	190
" 3	43.5	35.5	39.5	6	5	138	141
" 1*	26.3	33.4	29.9	12	15	455	448
3 WARDS	33.4	30.8	32.1	25	24	748	779
Negro Population							
Baxter Terrace	56.6	29.4	43.0	3	1	53	84
Fuld Court	62.5	0	31.3	1	0	16	22
2 PROJECTS	58.0	17.9	38.0	4	1	69	56
Ward 15	62.5	27.8	45.2	2	1	32	36
" 3	52.1	65.5	58.8	21	27	403	412
2 WARDS	52.9	62.5	57.7	23	28	435	448
City—Total	29.3	30.9	30.1	352	367	12,016	11,856
City—White	26.3	27.6	27.0	283	293	10,769	10,614
City—Negro	54.5	59.5	57.0	69	74	1,247	1,242

\* These rates are for the total ward as there are very few Negroes in Ward One



# COMMUNICABLE DISEASE RATES

Per 1,000 children under 15 years



## Communicable Diseases

The following communicable diseases of children were studied: whooping cough, chicken pox, mumps, measles, scarlet fever and German measles. The rates were adjusted for the population under fifteen years of age because a much larger percentage of the project population than of the ward population consists of children.<sup>1</sup>

The figures for the projects were obtained from the daily reports sent out by the Communicable Disease Division of the Health Department. These reports, which are sent to schools and other interested organizations and to the offices of each of the housing projects, list the names and addresses of all children reported to have contracted a contagious disease. From these reports were obtained the number of cases of the above diseases which occurred in the projects. The Health Department maintains monthly and yearly records showing the number of cases, of the various diseases, for the wards, and for the city, and they were utilized to obtain the figures for the control groups.

It has been suggested that because of the concentration of children in housing projects, communicable diseases would be likely to spread more quickly than in the rest of the population. However, although some of the projects have a high density rate, in terms of the number of persons per acre, there is no overcrowding in the dwellings. Apartments are assigned on the basis of family size, and as a family increases, it is moved into larger quarters, as soon as they are available.

In his article on "Better Housing as a Health Resource",<sup>2</sup> John Leukhardt points out that, "... in the incidence of the communicable diseases of children—Chicken Pox, Diphtheria, Scarlet Fever, etc.—the National Health Survey revealed relatively higher rates in the more crowded groups for several of these diseases, particularly Diphtheria and Mumps."

A study in Philadelphia in 1934 revealed that the average rate per 1,000 of communicable diseases for the slum area was 16.88, for the city 11.34, and in one area the rate was as high as 26.92.<sup>3</sup>

In the following comparisons of communicable disease rates in the projects and the wards, the drawing of conclusions is made difficult by the erratic nature of these diseases and by the fact that epidemics of one disease or another break out at various times. For instance, the number of cases of German measles in the city went down from 6,552 in 1941 to 379 in 1942, and then jumped to 9,113 in 1943. Mumps went from 1,389 in 1941 to 578 in 1942, and then up to 3,094 in 1943. Over a period of years a trend might be discerned, but as our figures cover only two years it was not possible to see any such trend.

The rates for each disease were computed separately, but since there was so much variation in the number of cases of some of the diseases, from 1942 to 1943, these individual rates are not given. Instead, it was thought advisable to use for com-

parison a "total rate" based on the combined cases of each of the six diseases.

### Rates in the Projects and Wards

Table 14, at the end of this chapter, gives the communicable disease rates for the projects, wards and the city. In 1942, for the white children, the rate was the same in Baxter Terrace and in Ward Fifteen. But the Negroes in the project had a higher rate than the Negroes in the Ward. In 1943 the rate was lower in the project than in the ward for both groups. For the total population, the rate average for the two years, was 113.3 in the project and 218.9 in the ward. For both the white and Negro children the rate declined from 1942 to 1943 in Baxter Terrace, but it increased considerably in Ward Fifteen.

In Fuld Court the white children had a lower rate than did the white children in Ward Three, in 1942, but the Negroes in the project had a higher rate than those in the ward. In 1943 both groups in the project had considerably lower rates than did the ward. For the total population, the rate averaged for the two years, was 116.6 in Fuld Court and 212.9 in Ward Three. The rate for the total population decreased from 1942 to 1943 in the project, and increased in the ward.

It is interesting to note that in both years, in Fuld Court and in Ward Three, the Negro children had a lower rate of communicable diseases than did the white children. In the city as a whole, however, the Negro children and a higher rate.

In Crane Village the rate was higher than in Ward One in 1942, but lower than in the ward in 1943. The rates averaged for the two years gave the projects a higher rate than the ward or 112.8 compared to 102.1. The project rate decreased from 1942 to 1943, whereas the ward rate increased. The rates for the city as a whole also increased from 1942 to 1943.

### Summary

1. In 1942 the rate of communicable diseases was significantly higher in the three projects combined than in the three wards. This difference was so large that it could hardly have been due to chance. In 1943 the combined projects had a much lower rate than did the wards. In fact, the chi square, which is a measure of the significance of the difference between the rates, was three times as large in 1943 as it was in 1942.
2. For 1942 and 1943 averaged, the rate for the combined projects was 114.2, for the combined wards 158.8.
3. In each of the three projects the rates for the total population decreased from 1942 to 1943, whereas for each of the wards and for the city, the rates increased.
4. In 1942 and 1943 the Negro children in both projects had much lower rates than did the Negro children in the city.

<sup>1</sup> For example, while 21% of the population of the city and 24% of Ward Fifteen is under fifteen years, 41% of Baxter Terrace's population falls into that age group.

<sup>2</sup> *National Conference of Social Work*, 1941, p. 485.

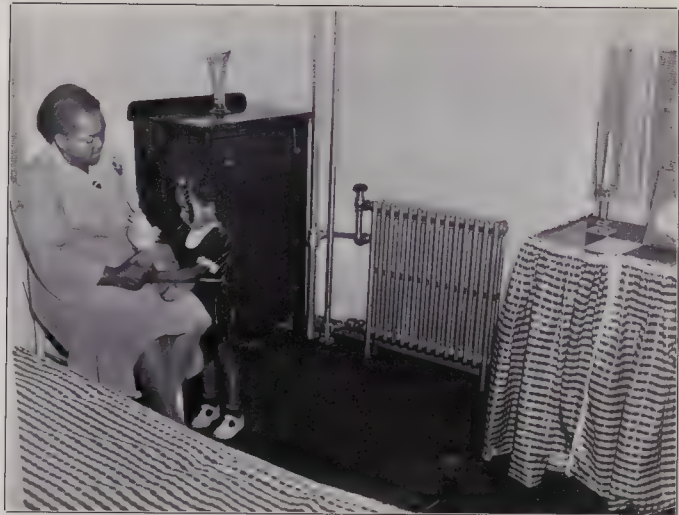
<sup>3</sup> *The Challenge of Housing*, Post, Langdon W., 1938, p. 44.

Table 14

Communicable Disease Rates, by Color, per 1,000 Children Under 15 Years, in the Projects, Wards and the City

Area	Rates			Cases		Population	
	1942*	1943	1942-43 averaged	1942	1943	1942	1943
Total Population							
Baxter Terrace	142.0	84.4	113.2	138	82	972	972
Fuld Court	128.0	105.1	116.6	43	52	336	495
Crane Village	132.4	98.1	112.8	81	57	612	612
3 PROJECTS	136.5	91.9	114.2	262	191	1,920	2,079
Ward 15	106.8	331.0	218.9	273	767	2,557	2,317
" 3	147.1	278.6	212.9	559	1,589	3,800	5,704
" 1	44.8	159.3	102.1	303	1,118	6,760	7,020
3 WARDS	86.5	231.0	158.8	1,135	3,474	13,117	15,041
White Population							
Baxter Court	119.3	73.6	96.5	84	21	285	285
Fuld Court	138.2	148.0	143.1	21	38	152	223
Crane Village	132.4	93.1	112.8	81	57	612	612
3 PROJECTS	129.6	99.1	114.4	136	111	1,049	1,120
Ward 15	119.1	316.1	217.6	244	623	2,049	1,971
" 3	218.9	767.9	493.4	232	986	1,233	1,234
" 1**	44.8	159.3	102.1	303	1,118	6,760	7,020
3 WARDS	82.1	265.4	173.8	829	2,727	10,097	10,275
Negro Population							
Baxter Terrace	151.4	88.8	120.1	104	61	687	637
Fuld Court	119.6	69.9	94.8	22	19	184	272
2 PROJECTS	144.7	83.4	114.1	126	80	871	959
Ward 15	57.1	416.2	236.7	29	144	508	346
" 3	110.3	136.4	123.4	277	603	2,512	4,420
2 WARDS	101.3	156.7	129.0	306	747	3,020	4,766
City Total	113.2	250.7	182.0	10,198	23,167	90,090	92,400
City White	94.1	235.2	164.7	7,337	18,683	77,940	79,440
City—Negro	235.5	346.0	290.8	2,861	4,484	12,150	12,960

\* The 1942 figures for Fuld Court and Ward Three are for the last eight months of the year only  
 \*\* These rates are for the total ward as there are very few Negroes in Ward One



A CLEAN AND CHEERFUL BEDROOM IN A PROJECT HOME.



WHAT HAPPENS WHEN ONE GETS MEASLES!

## Other Studies On Health And Housing

A brief survey of some studies that have been made here and abroad on the relationship between health and housing provide corroborative evidence of the social effects of good housing.

The Committee on the Hygiene of Housing has correctly pointed out "... more damage is done to the health of the children of the United States by a sense of chronic inferiority due to the consciousness of life in substandard dwellings than

by all the defective plumbing which those dwellings may contain."<sup>1</sup>

For further evidence on the effects of rehousing we will examine some studies made in England. In Liverpool, when we compare the city with a slum area and a municipal housing estate, where rentals are comparable to those in the slum area, we find the following results for the years 1923-1929:<sup>2</sup>

	Population	Deaths from all causes per 1,000 pop.	Deaths from pulmonary tuberculosis per 100,000 pop.	Infant mortality per 1,000 births
Entire City	872,802	18.9	123	98
Housing Estate	14,572	18.2	164	131
A slum area	3,486	28.4	299	171

From Liverpool we also have some data on the health conditions of a group living on the same site when it was a slum and after rebuilding. The rates

cover a three year period before demolition and three years after reconstruction (1916-18). The city rates are for this latter period.<sup>3</sup>

	Deaths from all causes per 1,000 population	Deaths from phthisis per 1,000 population	Infant mortality per 1,000 births
Before reconstruction	37.0	4.0	259
After reconstruction	26.6	1.9	162
Entire city	18.0	1.7	119

These figures are particularly interesting because in the slum district the houses are systematically cleansed, and private drains regularly flushed, and, in addition, bath and wash houses, infant welfare centers, and clinics have been provided in close proximity to the area. In other words, methods falling short of demolition have failed to prevent the continuance of the high death rate.<sup>4</sup>

In Manchester the mortality rate in St. George's Ward, which has a density of 92 persons per acre, was 19.45 whereas the rate for the city was 12.8. For Manchester's satellite-town of Wythenshawe with a density of only 6 persons per acre, the rate was 7.86.<sup>5</sup>

The following figures again show the comparative health situation in public housing projects and other areas. The first three places listed are the public housing estates.

<sup>1</sup> "Housing & Health," Dr Winslow, *Public Health Nursing*, Vol. 32, p. 435, July 1940

<sup>2</sup> Ford, op. cit. p. 372

<sup>3</sup> *Ibid* p. 373

<sup>4</sup> McAllister, op. cit., p. 3

<sup>5</sup> *Ibid*

	General Mortality	Infant Mortality	Tuberculosis Death Rate
<i>Welwyn Garden City</i>	5.9	25	.57
<i>Letchworth</i>	8.0	34	.38
<i>Wythenshawe</i>	7.9	60	.72
Manchester City	12.9	71	1.04
Manchester Clearance Area	17.3	120	1.97
Birmingham	11.1	65	.91
Newcastle	12.8	80	1.20
Edinburgh	13.3	70	.88
Liverpool	13.5	86	1.20
Glasgow	14.1	103	1.10
England and Wales	9.1	57	.80

The story told by these figures is obvious. Take the people out of the crowded slums of the Hulme district of Manchester and place them in the decent houses in the spacious, planned satellite Wythenshawe and you cut the death-rate by more than half. Place all the population of the country in well-planned areas similar to Wythenshawe, Letchworth, Welwyn, and you save more than a third of the people at present doomed to die because of bad conditions<sup>1</sup>

The following figures from Birmingham show the relationship between the overcrowded central wards of the city, and the reduction in crowding

as we move from the center of the city, and the incidence of disease.<sup>2</sup>

	Central Wards	Middle Ring	Outer Ring	City
Pneumonia Mortality Rates	1.06	.84	.61	.77
General Mortality Rates	18.50	12.20	9.80	11.30
Infant Mortality Rates 1912	170.00	105.00	75.00	—
Infant Mortality Rates 1936	87.00	62.00	52.00	—

From the Birmingham Health Report come the following death rates for 1930, for diseases "gener-

ally regarded as being associated with faulty environment."<sup>3</sup>

	Corporation Estates	Central Wards
Tuberculosis	0.87	1.48
Respiratory Diseases	0.87	2.48
Measles and Whooping Cough	0.28	0.45
Infantile Diarrhea (per 1,000 births)	4.80	13.90

<sup>1</sup> *Ibid.*, p. 7

<sup>2</sup> *Ibid.*, p. 5

<sup>3</sup> *Recess. op. cit.*, p. 74

In the 1931 health report, the Manchester Medical Officer of health said,<sup>1</sup>

There can be no possible doubt but that the new housing provided by the city itself has produced a continued and very definite improvement in the physical and mental well-being of those dwelling in the new estates.

Mr. Macdonald reports that,

A careful study of children in Garden Cities showed that boys and girls between the ages of six and twelve weighed more and were taller than those of a similar age and social status living in industrial towns. In 1917, the infant mortality rate for Letchworth was 36 per 1,000 while in

96 large urban centres, it was 104 per 1,000. The general death rate in Letchworth was 6.1, while in London it was 13.6 per 1,000.<sup>2</sup>

Finally, we have the results of a study made in Cincinnati, Ohio in 1940, showing the rates per 1,000 persons, for a housing project and an adjacent census tract.<sup>3</sup>

	Laurel Homes	Adjacent Census Tract
Juvenile Delinquency	10.7	79.4
Criminal Offenses	9.0	29.4
Fires (per 1,000 dwellings)	0.0	18.2
Pneumonia Deaths	.2	1.4
Tuberculosis Deaths	.6	1.9
Infant Mortality	.2	1.0

<sup>1</sup> *Ibid.* p. 75

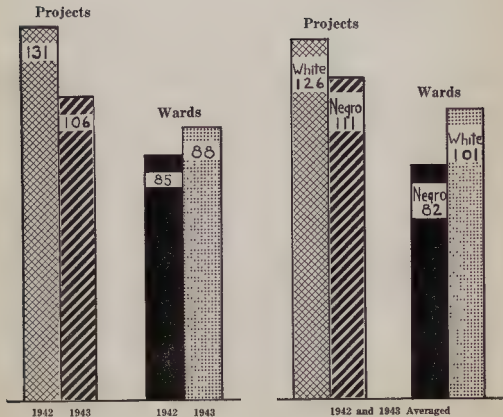
<sup>2</sup> *Life and Housing in Britain*, R. St. J. Macdonald, Social Council of Canada, 1929, p. 33

<sup>3</sup> NAHO News, July 22, 1944, p. 58



# BIRTH RATES

Per 1,000 women 15 to 40



## Birth Rates

In comparing the birth rates of the project population with the ward population it is necessary to make adjustments for differences in age, sex, and marital status. Otherwise an incorrect picture is obtained, as is borne out by a study of fertility in a Greenbelt community. Here the birth rates in the rehoused group (The Greenbelt community) were found to be 34.3 for 1939 and 35.5 for 1940, per 1,000 persons, as compared with 17 or 18 for the nation as a whole. But, as Elbridge Sibley showed<sup>1</sup>, if the Greenbelt rates were corrected by taking into account the different proportions of married women in each age group in the community as compared with the rest of the country, a completely different picture emerges. The standardized rate for Greenbelt would then be 15.5 per 1,000 persons as compared with 17.0 for the country.

In our study the number of births in the projects were obtained from the records of the Vital Statistics Division of the Health Department. The number of births in the wards and the city were obtained from the annual reports of the Health Department.

### Projects Have Higher Birth Rates

Before turning to a consideration of the adjusted birth rates, which are more reliable, the crude birth rates for the projects, wards, and the city, are given in Table 15, at the end of this chapter. It will be seen from this table that the crude birth rates are higher for the three projects than for the three wards, with the exception of Baxter Terrace and Ward Fifteen, where the ward has a slightly higher rate. Table 16, which gives the adjusted rates, shows the same picture of higher rates for the projects than for the wards, with the one exception mentioned.

From this it cannot be inferred that better housing alone accounts for the higher birth rates in the projects, since the birth rate is dependent upon a complex of factors including economic status and security, religious beliefs, etc. It is obvious that better housing alone will not check the tendency towards a declining birth rate, but as one element among many, housing cannot be ignored, for where people do not want children, the factors of space, privacy, fresh air, sunlight and recreation are undoubtedly important. Also, public housing does give a certain amount of security to families, since they know that they will not be dispossessed as soon as a reduction in income makes it impossible for them to pay the rent they had been paying.

The adjusted birth rates are based on the number of women 15 to 40. An analysis of the age composition of the project and the ward populations indicated that there were about the same per-

centage of women 15 to 40 in both groups. In the three projects 24% of the population consisted of women 15 to 40, as compared with 23.3% of the population in the three wards.

In this connection, the number of women in the child bearing ages who are married is of great importance. From the 1940 Census we found that in the city 56.3% of all females over fifteen years of age were married. A survey of Baxter Terrace, the largest project in the city, and one that is representative of the population composition of the low-rent projects, showed that 60.9% of all females over fifteen were married. We found that this difference in the percentage of married women would only alter slightly the ratio between the birth rates in the two groups.

### Adjusted Birth Rates

The adjusted rates for Baxter Terrace and Ward Fifteen, averaged for 1942 and 1943, are higher in the project than in the ward. A striking feature is the reduction from 1942 to 1943 in the birth rate among the Negroes of this project, a decline from 133.8 to 85.9, whereas the rate in the ward jumped from 62.3 to 100.6.

The rates averaged for the two years studied were higher in Fuld Court than in Ward Three, for both the white and the Negro populations. However in the project the birth rate of the white residents was reduced by about one half, from 1942 to 1943, whereas the rate for the Negroes in this project increased considerably. In the ward, the rate for the total population remained about the same, but the rate for the whites increased, whereas for the Negroes it decreased.

For Crane Village an additional comparison was made. Three blocks in Ward One were selected, representing an area from which a number of the project residents came, and containing about the same number of persons as the project. The rates for the project were compared with the rates for these three blocks and with the rates for the entire ward. Since this project was opened before the other two, we have the rates for three years and found that the average for these years was higher for the project than for the comparable blocks or the entire First Ward.

### Summary

Combining the rates for three projects and the rates for the three wards, we found higher birth rates in the projects than in the wards for both the white and Negro populations for both years studied. In both years the difference between these rates is statistically significant, or much greater than could be accounted for by chance.

1 "Fertility in a Greenbelt Community", Elbridge Sibley, *Social Forces*, Vol. 20, No. 4 p. 476, May 1942

**Table 15**  
**Birth Rates, by Color, Per 1,000 Persons in the Projects, Wards**  
**and the City**

Area	Rates			Births		Population	
	1942	1943	1942-43 averaged	1942	1943	1942	1943
Total Population							
Baxter Terrace	30.7	23.0	26.9	72	54	2,344	2,344
Fuld Court	28.4	25.9	27.2	34	31	1,198	1,198
Crane Village	34.3	29.0	31.7	45	38	1,311	1,311
3 PROJECTS	31.1	25.3	28.2	151	123	4,853	4,853
Ward 15	17.5	23.4	20.5	187	226	10,656	9,656
"    3	21.8	22.3	22.1	541	553	24,802	24,802
"    1	17.5	16.6	17.1	455	448	26,000	27,000
3 WARDS	19.2	20.0	19.6	1,183	1,227	61,458	61,458
White Population							
Baxter Terrace	26.2	27.5	26.9	19	20	726	726
Fuld Court	31.6	15.3	23.7	18	9	570	570
Crane Village	34.3	29.0	31.7	45	38	1,311	1,311
3 PROJECTS	31.5	25.7	28.6	82	67	2,607	2,607
Ward 15	17.7	22.7	20.2	155	190	8,774	8,374
"    3	12.7	16.7	14.7	138	141	10,830	8,430
"    1*	17.5	16.6	17.1	455	448	26,000	27,000
3 WARDS	16.4	17.8	17.1	746	779	45,604	43,804
Negro Population							
Baxter Terrace	32.8	21.0	26.9	53	34	1,618	1,618
Fuld Court	25.5	35.0	30.3	16	22	628	628
2 PROJECTS	30.7	24.9	27.8	69	56	2,246	2,246
Ward 15	17.0	28.1	22.6	32	36	1,882	1,282
"    3	23.8	25.2	27.0	403	412	13,972	16,372
2 WARDS	27.4	25.4	26.4	435	448	15,854	17,654
City Total	28.0	26.9	27.5	12,016	11,856	429,000	440,000
City White	28.0	27.1	27.6	10,769	10,614	384,000	392,000
City Negro	27.5	25.9	26.7	1,247	1,242	45,000	48,000

\*These rates are for the total ward as there are very few Negroes in Ward One

Table 16

Birth Rates, by Color, Per 1,000 Women 15 to 40 Years, in the Projects,  
Wards and the City

Area	Rates			Births		Population	
	1942	1943	1942-43 averaged	1942	1943	1942	1943
<i>Total Population</i>							
Baxter Terrace	127.9	95.9	111.9	72	54	563	563
Fuld Court	114.5	104.4	109.5	34	31	297	297
Crane Village	152.0	123.4	140.2	45	38	296	296
<b>3 PROJECTS</b>	<b>130.6</b>	<b>106.4</b>	<b>118.5</b>	<b>151</b>	<b>123</b>	<b>1,156</b>	<b>1,156</b>
Ward 15	81.4	103.8	95.1	187	226	2,297	2,077
"    3	91.0	93.1	92.1	541	553	5,943	5,943
"    1	79.5	75.4	77.5	455	448	5,720	5,940
<b>3 WARDS</b>	<b>84.7</b>	<b>87.9</b>	<b>86.3</b>	<b>1,183</b>	<b>1,227</b>	<b>13,960</b>	<b>13,960</b>
<i>White Population</i>							
Baxter Terrace	113.8	119.8	116.8	19	20	167	167
Fuld Court	139.5	69.3	104.7	18	9	129	129
Crane Village	152	123.4	140.2	45	38	296	296
<b>3 PROJECTS</b>	<b>138.5</b>	<b>113.2</b>	<b>125.9</b>	<b>82</b>	<b>67</b>	<b>592</b>	<b>592</b>
Ward 15	127.0	110.5	118.8	155	190	1,220	1,719
"    3	59.6	83.4	71.5	138	141	2,315	1,691
"    1*	79.5	75.4	77.5	455	448	5,720	5,940
<b>3 WARDS</b>	<b>80.6</b>	<b>83.3</b>	<b>82.0</b>	<b>746</b>	<b>779</b>	<b>9,255</b>	<b>9,350</b>
<i>Negro Population</i>							
Baxter Terrace	133.8	85.9	109.9	53	34	396	396
Fuld Court	95.2	131.0	118.1	16	22	163	163
<b>2 PROJECTS</b>	<b>122.3</b>	<b>99.3</b>	<b>110.8</b>	<b>69</b>	<b>56</b>	<b>564</b>	<b>564</b>
Ward 15	62.3	100.6	81.5	32	36	514	353
"    3	111.1	96.9	104.0	403	412	3,628	4,252
<b>2 WARDS</b>	<b>105.0</b>	<b>97.2</b>	<b>101.1</b>	<b>435</b>	<b>448</b>	<b>4,142</b>	<b>4,610</b>
City Total	121.8	117.2	119.5	12,016	11,856	98,670	101,200
City White	123.8	119.6	121.7	10,769	10,614	86,970	83,720
City—Negro	106.6	99.5	103.1	1,247	1,242	11,700	12,480

\* These rates are for the total ward as there are very few Negroes in Ward One



## Fatal Home Accidents

### Project Homes Are Safer

The Vital Statistics Division of the Health Department files its records of deaths alphabetically. To obtain death rates for the rehoused population and the control groups it would have been necessary to go through thousands of cards picking out the addresses in our areas of study. This was more of a task than we had the time or staff for. However, in these death records there was a classification giving the deaths due to accidents and from these the number of fatal home accidents in the projects and the control groups was taken.

It is known that home accidents are responsible for many injuries and deaths, and that these accidents are largely due to faulty conditions of the home. "... nearly as many persons lose their lives from accidents in the home as are killed by automobiles."<sup>1</sup> The National Health Survey revealed that "home accidents increase heavily as the rental rate or value of the home decreases."<sup>2</sup> Nathan Straus points out<sup>3</sup> that among the 70,000 people living in 49 housing projects all over the country there were 131 home accidents, one of these being fatal.

As shown in Table 17, the population in four wards studied, adjusted for nine months of 1943, was 77,100, and during this period there were 19 fatal home accidents, compared to the one death among the 70,000 people in the above mentioned projects. Because of the low accident rates maintained in the projects, the insurance rates are less than one-third of what is generally charged.

Through September 1943, there was no case of a fatal home accident in any of Newark's projects. However, this was not the case for the wards studied. Table 17 gives the rate of fatal home accidents per 10,000 persons in four wards and for these wards combined.

It should be remembered that each of these wards, except the Eighth, represents an area typical of that from which the project residents came. Ward Eight, in which Crane village is located, is a superior housing area and yet, for 1942 and 1943 there was an average rate of 2.6 fatal home accidents per 10,000 persons, as compared to the rate of zero for the projects.

The average number of fatal home accidents for the four wards in 1942 and 1943 combined, was 2.5 per 10,000 persons. If the total project population of 10,207 persons had been living in the homes from which they came, instead of in the projects, there would have been about three fatal home accidents each year among these persons, instead of no accidents.

The reader may recall that in Part II data were given on non-fatal home accidents among rehoused families and families waiting for project apartments, and living in substandard houses. Whereas there were a number of accidents in the latter group, there was not a single accident in the rehoused population.

### Summary

- 1 There were no fatal home accidents in project homes, but there were 2.5 per 10,000 persons each year in the wards studied.
- 2 Comparing some rehoused families with a group waiting to be admitted to projects, we found many serious home accidents in the latter group and none among the project families.

Table 17

Fatal Home Accidents Per 10,000 Persons in Wards 1, 3, 8 and 15

Wards	Population		Fatal Home Accidents		Rates		
	1942	1943*	1942	1943	1942	1943	1942 & 1943 Averaged
Ward 1	25,813	19,859	6	2	2.3	1.0	1.7
" 3	25,863	19,398	6	8	2.3	4.1	3.2
" 8	39,301	29,475	12	6	3.1	2.0	2.6
" 15	11,824	8,863	2	3	1.7	3.4	2.5
4 WARDS	102,801	77,100	26	19	2.5	2.5	2.5

\* The rates for 1943 are based on the first nine months only

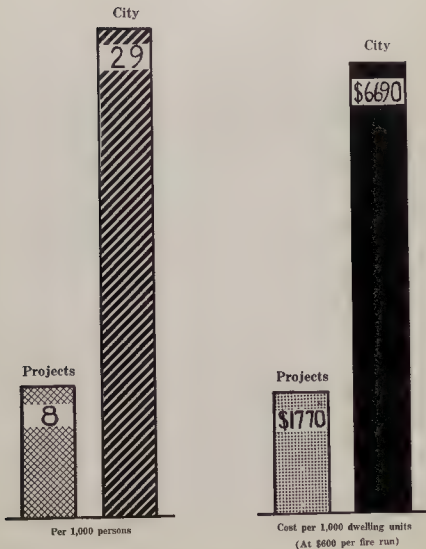
<sup>1</sup> *Housing and the Community*, The President's Conference on Home Building and Home Ownership, Washington, D. C., Vol. VIII, 1932

<sup>2</sup> "Better Housing as a Health Resource", Leukhardt, John C., *National Conference of Social Work*, 1941, p. 485

<sup>3</sup> *The Seven Myths of Housing* Nathan Straus, 1944, p. 159.

# FIRE S

In Dwellings



Figures are for 1942 and 1943 averaged

## Fires

Since the housing projects are fire proof, it is obvious that fire rates there should be lower than in the surrounding areas. This investigation attempts to establish to what extent this is the case. A reduction in the number of fires is not the only way in which public housing has cut down municipal costs for fire protection. As an official of the city Fire Department pointed out, an important part of its budget is for the inspection service whereby fires are prevented. These inspections must be regularly maintained, especially in the type of slum structures from which most of the project dwellers came. However, only occasional and routine inspections of the projects are required because of their fire proof construction.

It was also pointed out that there is really no comparison between the cost of putting out a fire in an apartment in one of the projects with one in a dwelling unit outside. The above official said "Most of the fires in the projects could be put out with an extinguisher." Since the projects are fire proof, if a fire is started, it does not spread very far. On the other hand, by the time firemen reach a fire in a typical dwelling in the city, the whole building may be burning down and the one next to it in danger.

Reports such as *An Analysis of a Slum Area in Cleveland*<sup>1</sup> indicate the disproportionate rate of fires in slums. The Cleveland study of a slum area of 333 acres, containing 247% of the city's population and .73% of its land area clearly shows the excessive cost of protecting a slum area. While the area contained only 2.47% of the population, it accounted for 14.44% of the cost of fire protection for the city. The per capita cost for the city was \$3.12 and for this section \$35.13 in this area as compared to \$.44 for the city.

As Straus<sup>2</sup> points out, the fire proof construction of housing projects has resulted in greatly reduced insurance costs, representing a 60% reduction in premium payments from rates charged for private housing.

### Projects Replace Fire Traps

The projects in Newark cleared twelve square blocks of slum area and replaced them with fire proof dwellings. This indicates the potential saving to the municipality as a consequence of the erection of these projects.

Newark's Bureau of Combustibles and Fire Risks keeps a daily record of all fire calls, giving detailed information about the location, nature, cause and loss entailed by the fire. From this record the number of fires in the projects was obtained. Since

these records were not kept so as to show the number of fires by wards, it was decided to compare the fires in all seven of the city's housing projects with the rest of the city—using fires in dwellings only.

Table 18 compares the rate of dwelling fires per 10,000 persons, in the seven projects in Newark with the city as a whole. The difference is great, the rate being 6.9 in the projects as compared to 29.2 in the city for 1942, and 8.8 as compared to 28.4 in 1943.

However, this difference is not as large as it would have been if the projects had been compared with carefully selected control groups. The city as a whole includes many well constructed homes where fire rates are low. But, if the projects had been compared with areas confined to the type of dwellings from which the project residents came, the difference in the rate between the two areas would have been much greater than that shown above.

The loss due to fires in the projects, spread over the 10,207 residents, is shown in Table 19. In 1942 the per capita loss entailed by fires was \$.02 and for 1943 it was \$.01. Unfortunately this data could not be compiled for the city as the annual fire report shows the loss from all fires and as this includes many fires besides those in dwellings, the figures would not be comparable.

Repeated efforts to get an official estimate of the average cost of a fire run were unsuccessful, and we decided to use the sum of \$600.<sup>3</sup> In Minneapolis the average cost to the city for a fire run was \$800.<sup>4</sup> The actual amount is not important, as we are mainly concerned with the ratio between the cost of fire protection in the projects and in the dwellings of the city as a whole, and this ratio would remain constant whatever the figure selected.

### Cost of Fire Protection

As shown in Table 20, using \$600 as the average cost of a response to a fire, we find that the cost of fire protection per 10,000 persons, was \$4,140 in the projects as compared to \$17,520 in the city for 1942, and \$5,280 as compared to \$17,040 in 1943. This table also shows the saving in the cost of fire protection in the projects as compared to the city. This saving amounted to \$13,380 per 10,000 persons in 1942 and \$11,760 in 1943. This meant a saving of \$1.34 per capita in 1942 and \$1.18 in 1943 for each of the 10,207 project residents. Of course, these figures do not take into account the tremendous additional cost entailed by losses due to fires.

<sup>1</sup> Rev. R. B. Nava, 1939, p. 9.

<sup>2</sup> N. Straus, op. cit., p. 11.

<sup>3</sup> The average annual cost of the fire department was about \$2,000,000, and the average number of fires each year was about 3,200.

<sup>4</sup> Dividing the cost of running the department among the number of fires, gives \$655 as the approximate cost of a fire run in Newark.

<sup>5</sup> *Urban Housing, The Story of the F.W.A. Housing Division Bulletin No. 2, Federal Emergency Administration of Public Works,*

1936, p. 9.



The number of fires, per 1,000 dwelling units in the seven projects and in the city are shown in Table 21. In 1942 there were 2.6 fires per 1,000 project homes compared with 11.2 for the city as a whole, and in 1943 these figures were 3.3 and 11.1 respectively.

The projects contain .024% of the city's population, but had only .006% of the city's dwelling fires. If the projects had the same proportion of fires as the rest of the dwelling units in the city, there would have been thirty-one fires in 1942 instead of seven. On the other hand, if the city had the same proportion of fires as the projects, the number of fires would have been 291 instead of 1,253.

On the basis of \$600 per fire run, the cost of fire protection for the projects in 1942 would have been \$18,600 instead of \$4,200 if the rate of fires in the projects had been equal to that in the city.

If the number of fires per 10,000 persons had been the same in the city as in the projects in 1942, the saving at an estimated \$600 per fire call

would have been about \$574,200. This amount does not take into account the losses in life and property due to fires, but only refers to the cost of responding to fires. It is evident that the other costs would be tremendous. In Newark, the loss entailed by fires in 1943 was \$1,048,081. This includes all fires not only those in dwellings. This was a loss of \$233 per 100 persons in the city

### Summary

1. There was an average of three fires per 1,000 homes each year in the projects compared to 11.2 fires in that many homes in the city. The difference between these rates is statistically highly significant.
2. It cost \$4,710 for fire protection per 10,000 persons living in the projects and \$17,280 per 10,000 persons living in the city
3. Considerable saving would have resulted if the rate of fires in the city had been as low as the rate in the projects.

Table 18

### Fires in Dwellings per 10,000 Persons in the Seven Projects and in the City of Newark

Area	Population		Fires		Rates		1942 & 1943 Averaged
	1942	1943	1942	1943	1942	1943	
7 Projects	10,207	10,207	7	9	6.9	8.8	7.9
City	429,000	440,000	1,253	1,249	29.2	28.4	28.8

Table 19

## Losses Due to Fires in Projects

Population	Loss		Per Capita		Per 1,000 Persons	
	1942	1943	1942	1943	1942	1943
10,207	\$202	\$113	\$ .02	\$ .01	\$1.98	\$1.11

Table 20

Cost of Fire Protection per 10,000 Persons in the  
Seven Projects and the City

Area	Fires per 10,000 Persons		Cost of Fire Protection Per 10,000 Persons*	
	1942	1943	1942	1943
City	29.2	28.4	\$17,520	\$17,040
Projects	6.9	8.8	4,140	5,280
<i>Savings in Projects</i> Per 10,000 persons			\$13,380	\$11,760

Table 21

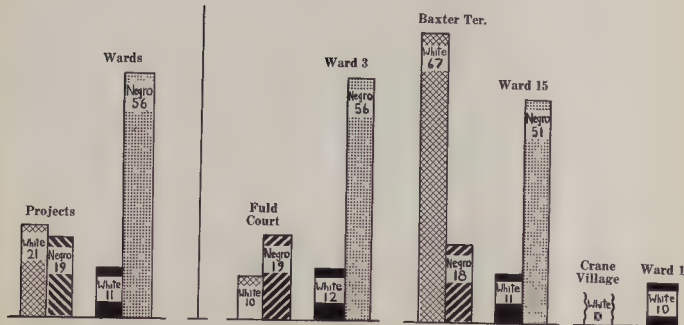
Rates and Cost of Fires per 1,000 Dwelling Units in the Seven  
Projects and the City

Area	Number of Dwelling Units	Number of Fires		Rate of Fires Per 1,000 Dwelling Units			Cost of Fire Protection per 1,000 Dwelling Units*		
		1942	1943	1942	1943	1942-43 Aver- aged	1942	1943	1942-43 Averaged
7 Projects	2,733	7	9	2.6	3.3	3.0	\$1,560	\$1,980	\$1,770
City	112,194	1,253	1,249	11.2	11.1	11.2	6,720	6,660	6,690

\* Using \$600 as the average cost of a fire run.

# JUVENILES ON PROBATION

Per 1,000 boys 10 through 17



1942 and 1943 Averaged

## Delinquency And Crime

The problem of delinquency and crime is a complex one, and any explanation in terms of a single factor cannot be adequate. There have been many studies indicating the close relationship between slums and delinquency. But, bad housing is only one factor in the complex that makes up a slum, and it is but one factor among many that gives rise to delinquent behavior.

From a slum in Hartford, Conn., covering one tenth of the city's area, and including one-fourth of its population, came 37% of its juvenile delinquency and 62% of all arrests for adult delinquency.<sup>1</sup> From a slum in Cleveland, Ohio, constituting .73% of the city's area, and 2.47% of its population, came 21.3% of its crime, 26.3% of its vice, 6.8% of its delinquency, and 10.4% of its illegitimate births. Police protection in this section of the city cost \$11.50 per capita as compared to \$4.87 for the city as a whole.<sup>2</sup>

In Chicago, 25% of all juvenile delinquents came from a slum area having but 10.9% of the city's juvenile population and 5% of its total area.<sup>3</sup> In a study of housing in Denver, Colorado, it was found that the areas of substandard housing were also the areas of high delinquency.<sup>4</sup> The New Jersey Juvenile Delinquency Commission found that,

For the most part, the delinquency rate was highest in the areas where housing was least adequate. Delinquency flourishes in congested homes, where there is no room to preserve the amenities. This is the case whether the family lives in a city tenement or in a rural cabin.<sup>5</sup>

The following table shows the disproportionate amount of juvenile delinquency in the slum areas of various cities.<sup>6</sup>

	Per Cent of City Area	Per Cent of Juvenile Population	Per Cent of Juvenile Delinquency
Philadelphia . . .	9.4	25.1	46.0
Cleveland . . . . .	17.3	26.8	47.4
Birmingham . . .	12.1	12.2	25.0
Richmond . . . . .	18.8	31.0	50.0
Denver . . . . .	5.7	11.0	25.0
Seattle . . . . .	6.3	11.2	25.0

The Philadelphia Housing Authority found that the rate of juvenile delinquency per 1,000 persons

in three of its projects, containing 11,784 persons, was 1.27 compared to the rate of 2.84 for the city. The project rate was 43% less than the rate for the city.<sup>7</sup>

In 1935, in England and Wales the proportion of probationers for all juveniles under sixteen was 0.3 per cent and for all people aged sixteen and over, 0.036 per cent. At Watling the comparable figures were 0.05 per cent and 0.005 per cent.<sup>8</sup>

The Chief of Police (of Liverpool) reported that after the slum dwellers had been rehoused, the annual number of arrests among the very same people, had declined to 17% of what they had been a short time before.<sup>9</sup>

In his study of *Substandard Housing As a Potential Factor in Juvenile Delinquency in a Local Area in New York City*, Abraham Goldfeld comes to the conclusion that, "The physical aspects of housing bear no relation to the rates of juvenile delinquency—this much the study of a high delinquency area in New York City indicates with unarguable clarity."<sup>10</sup> However, although housing as an isolated factor may show no correlation with delinquency, it cannot be neglected in an organized program to eliminate delinquency. Goldfeld's thesis is that "the right kind of housing, intelligently conceived, purposefully managed, and adequately financed, is a powerful tool for combating juvenile delinquency."<sup>11</sup>

These observations could be continued indefinitely, but the general conclusion of most studies, that inadequate housing and delinquency, are related phenomena, seems sufficiently clear. It must be emphasized that housing alone—in terms of a physical structure—cannot account for delinquency and crime.

### Juveniles on Probation in Newark

The data on juveniles and adults on probation were obtained from the Essex County Probation Department. Because the Probation Department records the type of housing from which offenders came, they were able to furnish us with the number of juveniles and adults on probation from the projects, as well as the number in each ward, and in the city.

three types of economic areas, and the city as a whole. The delinquency rates in the four low-rent projects were lower in the two years studied (1942 and 1943) than the rates in the low economic area. This report is apt to give a wrong impression of juvenile delinquency as the housing projects because the emphasis in comparison is with the city as a whole, rather than with the low economic area with which the low-rent projects are more directly comparable.

<sup>8</sup> Watling, *Survey of the Social Life in a New Housing Estate*, Roth Dis-art, 1939, p. 72.

<sup>9</sup> *New Housing in Canada and Other British Nations*, James F. Coughlin, 1-37, p. 19.

<sup>10</sup> Op. cit., p. 104.

<sup>11</sup> Op. cit., p. 105.

<sup>1</sup> Lees, op. cit., p. 18.

<sup>2</sup> Navin, op. cit., pp. 5-7.

<sup>3</sup> Post, op. cit., p. 55.

<sup>4</sup> *Housing in Denver*, Business Study No. 99, University of Denver, 1941, p. 29.

<sup>5</sup> *Justice and the Child in New Jersey*, Report of the New Jersey Juvenile Delinquency Commission, 1939, p. 89.

<sup>6</sup> *Slums and Outcast Areas in the United States*, Edith Elmer Wood, 1935, p. 56.

<sup>7</sup> We have just received a copy of the Pittsburgh Public Housing Report, Number Two, *Juvenile Delinquency in Public Housing*, September 1944. This report is based on a study of juvenile delinquency in Pittsburgh and compares delinquency rates in the public housing projects, with those in

To get a complete picture of juvenile delinquency would have meant going through the records of the Police Precincts, Police Courts, the County Juvenile Court, etc., and we were not able to do this. However, we believe that the number of juveniles on probation is a reliable index of the delinquency situation, for the majority of juvenile offenders are placed on probation. In 1943 there were 690 arrests of juveniles in Newark and 479 or 69% were placed on probation.

Tables 24 and 25, at the end of this chapter, give the rates for juveniles on probation in the projects and the comparable areas. In Table 25 the rates are adjusted for the number of boys 10 through 17 years of age, in order to eliminate the effect of variations in the population distribution in the projects and the wards. There were no girl delinquents in the projects. Since delinquency rates are frequently based on the total population, Table 24 presents the data on this basis to facilitate comparison with other studies.

### Projects and Control Groups Compared

In 1942 there were no cases of juveniles placed on probation in any of the housing projects. For the three wards studied the rate was 24 per 1,000 boys 10 through 17 for that year, and in the city as a whole the rate was 12. In 1943 there were a number of cases in the projects. This increase in juvenile delinquency was felt throughout the country, as well as in this community. In the county juvenile delinquency went up about 25% in 1943.

The adjusted rates indicate that in Baxter Terrace and Fuld Court the rate of juvenile delinquency in 1943 was higher in the projects than in the wards for the white boys, but lower for the Negro boys. In Crane Village there were no juveniles on probation in 1942 or 1943, as compared with an average for the two years of 11 per 1,000 boys in Ward One.

Since, in general, delinquency among the Negroes is greater than among the whites, it is significant that in Baxter Terrace where both the white and Negro groups are from approximately the same economic level, and the same physical environment, the rate of delinquency among the Negro boys was much lower than that among the white boys.

The rate for the Negro boys in the projects was lower than the rate for the control groups or for the city. In 1942 there were no cases in the projects, and in 1943 the rate was 37 in the projects, as compared to 48 in the wards and 45 in the city.

It is interesting to note that there were no girls among the juveniles on probation in the projects. On the other hand, an average of 22% of the juveniles in the three wards studied were girls. Table 22, below, shows the percentage of girls among the juveniles on probation in each of the wards, and in the city.

Table 22

Percentage of Girls Among the Juveniles on Probation, in the Projects, Wards and City in 1943

	Girls	Total	% of Girls
Projects	0	18	0
Ward 15	4	31	13
" 8	18	79	23
" 1	8	28	29
City	79	479	16

### Adult Offenders

Of the adult population not as great a percentage of the offenders is placed on probation as is the case with juveniles. Since our information on adult offenders is confined to those on probation, it provides only an incomplete picture of crime in the projects and the wards.

Table 26, at the end of this chapter, gives the rates of adults on probation, first per 1,000 of the population, and then per 1,000 persons 21 years and over. From the three projects studied there were three adults placed on probation in 1942 and six in 1943. The adjusted rates in 1942 were 12 per 1,000 persons 21 and over in the projects, 65 in the wards, and 30 in the city. In 1943 although the rates went up in two of the three projects studied, they were still lower than the rates for the wards. The adjusted rate in 1943 combined for the three projects was 2.5, for three wards 5.8, and for the city 2.7.

### Some Factors in Delinquency

Because of the high rate of juvenile delinquency in Baxter Terrace, a more intensive study of this project was made. Statistics may indicate that a given condition exists, but an understanding of that condition can only come from a more intensive study of the situation.

After an investigation of that project the following points seemed relevant in explanation of the high delinquency rate there.

### Inadequate Recreation Facilities

It has been assumed by some that delinquency and crime would automatically be reduced as a direct result of rehousing. But, as our earlier discussion indicated, housing alone is not sufficient to bring about this result. However, a well-planned housing project combined with other conditions might indeed be expected to effect such a change. One of the most important of these accompanying conditions is a well organized recreation program. The program in Baxter Terrace is new and as yet inadequate for a project of its size. There are almost 1,200 persons under eighteen years and only two recreation supervisors. Obviously this is not sufficient supervision for 1,200 young persons.

Although Baxter Terrace is Newark's largest

project and consequently has many more children and adolescents than the other projects, it has the same recreation facilities and number of recreation supervisors. This means that physical facilities and the supervision are inadequate for providing the kind of program that would attract and include all the young people.

Consequently, of those children who have not been included in the planned recreation, some will go off in search of other activities to occupy their time. Some of them go back to their old neighborhoods and friends, as did a boy of twelve years who lived in the project, and who became involved in a robbery with other boys from his old neighborhood. In several other cases of delinquency in the project, two groups of boys, one of eight and one of four persons, jointly committed offenses that resulted in their being placed on probation.

Although we do not think that recreation is the only answer to the problem of delinquency, it can be one of the most important weapons in combating it. It is evident that if a boy is busy at the playground in a game of baseball, he cannot be elsewhere getting into trouble. But, a recreation program must provide activities that are exciting if the boys are not to prefer joining the "fellas" on the corner.

It should be noted that every case of juvenile delinquency in the project occurred during November and December. The recreation director stated that the winter months were the most difficult in which to devise a program that would accommodate everybody for at this time of the year most of the activities had to take place indoors, where there was a lack of space and facilities.

### The Neighborhood

One housing project may not be sufficient to change the character of a neighborhood, which as many ecological studies have shown, is basic in the problem of delinquency. This project is located near the downtown section of the city, in the immediate neighborhood of stores, factories, gasoline stations, taverns, and across the street from a railroad. In the face of inadequate parental supervision, and of planned recreation of a type which can compete with these attractions, they offer a ready substitute.

### Projects Families with Court Records

Since the comparison of the project with the ward is made with the assumption that the populations of the two areas are comparable in all relevant respects but that of housing, it is always necessary to re-examine this assumption. With regard to the indices discussed in the previous chapters this assumption seemed sound, but, with regard to delinquency the following situation was found.

When this project was ready for occupancy the

Probation Department made a concerted effort to get many of the families with members under its supervision, into the project, hoping that this would assist in their rehabilitation. The Housing Authority cooperated in this effort, which resulted in a number of families being placed in the project who already had members with some type of court record.

A survey made in the project in February, 1944 revealed that 102 of the 611 families living in the project at the time, or 17%, had one or more members with a record in the Probation Department. Of the thirteen juveniles placed on probation in 1943, two had records before moving into the project, and five others came from families where one or more members had a court record.

A breakdown of the offenses of the 102 project families with members having records in the Probation Department, is shown in Table 23, on the following page.

We have no comparable figure showing the percentage of families in the ward having records with the Probation Department, but the 17% found in the project, seems very high. This may indicate that the project has a large number of problem families. Twenty-four cases of non-support and three of neglect of children, indicate that family ties and parental supervision were likely to be inadequate. A recent study<sup>1</sup> of 142 cases of delinquency, in analyzing the "major contributing factor" indicated it to be "lack of supervision" in 59 instances. Strong family bonds, where members feel a responsibility to their family as well as to themselves, are a strong deterrent to delinquent behavior. Even more important is the fact that such urgent human impulses as the need for security, and affection, are often left unfulfilled in such families.

the modern trend in psychology as it applies to the offender is to stress not low intelligence nor the gross physical, economic, or social circumstances of the individual's life, but the more subtle aspects of the individual's emotional life: his feelings of security or its lack, his desire for personal recognition, affection, and attention; feelings of rejection, inadequacy, or jealousy; unhappiness about family problems; and other sources of mental conflict.<sup>2</sup>

When a child fails to find the satisfaction for his needs in his family he may find it by participating in a gang, where the group friendships and loyalty may substitute for the attention and satisfaction he fails to get from his family. All eight of the white boys placed on probation last year were apprehended for the same offenses, committed as a group. Of the five Negro boys, four of them acted together.

<sup>1</sup> Report of the Parent Child Assistance Committee, Plainfield, N. J. 1944.

<sup>2</sup> "Some Aspects of the Psychology of the Offender," John M. McGinnis, Ph. D. *Federal Probation*, V 8, No. 1, 1944, p. 20.

Table 23

**Type of Offenses Committed by Baxter Terrace Residents With Probation Records Prior to Admission to Project**

Offense	White Negro Total		
Adults			
Nonsupport	12	12	24
Larceny	3	3	6
Disorderly conduct	8	2	5
Neglect of children	1	2	3
Assault and Battery	0	3	3
Possessing Lottery slips	2	0	2
Exact offense not stated in our records	11	23	24
Miscellaneous	3	6	9
White cases			
Excessive drinking	1		
False statements to ERA	1		
Robbery	1		
	3		
Negro cases			
Lewdness	1		
Adultery	2		
Violating Alcoholic Beverage Act	1		
Second degree murder	1		
Robbery	1		
	1		
Juveniles			
Larceny	—	2	2
Difficulty in school	—	2	2
Robbery	—	1	1
Larceny and Rape	—	1	1
Truancy	—	1	1
Stealing	1	1	2
Exact offense not stated in our records	1	6	7
	—	—	—
Total Number	37	65	102
No. of families in project			
No. of families with offenders	199	412	611
% of project population	19	16	17
% of offenders	31	69	100
% of juvenile delinquents in 1943	36	64	100
	62	38	100

The percentages shown in Table 23 indicate that upon moving into the project, the proportion of whites and Negroes with probation records was about the same as their proportion in the total population. However, the number of white juvenile delinquents in 1943, is far out of proportion to their number in the population. Sixty-two percent of the delinquents were white, while only 31% of the project population was white. The Negroes contributed only 38% of the delinquents, but 69% of the population.

This situation is particularly interesting because it is the reverse of what is usually found. For example in 1943 in Newark there were 199 Negro and 283 white juveniles on probation. This gives a rate of 4.4 per 1,000 Negroes as compared with .74 per 1,000 white persons.

## The Racial Factor

In Baxter Terrace in 1943 the number of juveniles on probation, per 1,000 persons, was 11.0 for the white population and 3.1 for the Negro population. It is important to note that in this project the white people are in the minority, consisting of about 31% of the population. In Baxter Terrace the buildings occupied by the white families are separated by a street from those in which the Negroes reside. Consequently, this street has taken on a particular significance as a dividing line between the "white side" and the "Negro side."

Since the "Negro side" is larger, the biggest playground is in this area. And, as there are many more Negro than white children in the project, the recreation program tends to be centered there. Every attempt is made by the recreation director and his assistant to get all the children to participate, but with the white parents admonishing their children not to go over on the "Negro side," it is difficult to carry out this program. Since it is the whites who tend to reject the program, they are the ones who are excluded. They must therefore fall back upon their own efforts for ways to occupy themselves, and this may partially explain the high rate of juvenile delinquency among them.

## Interviews

Ten of the families in which there were juveniles with probation records at the time they moved into Baxter Terrace, were interviewed, in an attempt to determine how their new environment had affected them. In each case the mother was interviewed. Only three of the ten mothers felt that the project had not brought about any improvement. There was the usual tendency of these parents to attribute the cause of their children's delinquency, which they were unable otherwise to understand or explain, to faulty heredity, always, of course, from the other parent. In one interview,

The tenant stated that her son's characteristics were identical to his father's, who was at the time serving a prison term. Mr. R, a habitual drunkard, would prefer stealing an item rather than use the money he had to purchase it. This trait is one of the many seen in the son. Mrs. R claimed that environmental conditions and better living quarters had no effect on her son, nor could she attribute his offense (stealing a bike when fourteen years old) to the influence of bad company, because he never had any friends. While visiting her son who was awaiting trial he said, "Don't worry about me, I'll get out. They won't do anything with me."

It would require a psychiatric examination to reveal the attitudes underlying this boy's behavior. His lack of friends, his attitude towards authority, his refusal to attend school, to stay at a job, are indicative not of defective genes but of a basic personality maladjustment.



A SAFE PLACE TO PLAY





WHERE DO THEY PLAY AROUND HERE?

Seven of the ten mothers talked to, felt that the change of environment had had a favorable effect on the delinquent.

Mrs. H stated that her son was born out of wedlock, and that the father of this child has always been unreliable, a drunkard and a shiftless worker. After the death of his wife, he deserted his children, who were quite young. Mrs. H feels that these traits have been inherited by her son who began to show signs of delinquency at the age of six. At this age, he would wander away from home seeking adventure. Mrs. H married a man who accepted this child as his son. During this time the family experienced extreme poverty due to unemployment and occasionally lived in one room, or had no place to stay at all. On one occasion while seeking living quarters, the son, who was now eight and who had left home, was found standing on a street corner. When found, his first remark to his mother was, "Have you found a place for us to stay?" Mrs. H feels that even though quite young, her son worried about home conditions and their having no place to live. Even though this family always resided in unwholesome neighborhoods, Mrs. H does not feel that this was a contributing factor to her son's delinquency, but rather she attributes it to an inherent weakness.

Because of truancy and getting into difficulties in school, this boy was placed in the City Home for one and one-half years. Although his mother says above that his environment was not a contributing factor in this child's delinquency, she stated that, "After his release, when the family came to the project, the boy showed marked improvement." However, before many months he was again getting into difficulty and was sent to the State Home for Boys.

Again it is evident that this boy's behavior can be better understood, not in terms of inherited anti-social traits from a shiftless father, but in terms of an unstable family situation where the child felt insecure and unwanted, as indicated by his continuously running away.

In the remaining six cases there was more definite evidence of better adjustment after moving into the project. The following three excerpts from the interviewer's reports are typical:

1. When K Jr. was released from the State Home for Boys he came to the project where his family was already living. Mrs. K feels that living in the project has improved K Jr.'s conduct and instead of spending most of his time in the street with his friends, he brings them to his home.

2. Mrs. J said that moving into the project has been a definite factor in assisting her son to make a better adjustment—especially since there was a change of neighborhoods and associates.

3. Moving into the project has been a definite influence on her daughter according to Mrs. C. Since the change of environment

and having better living quarters the daughter has become affiliated with various clubs within the project and no longer desires her previous friends and activities.

At the time this investigation was made, in 1944, there were seventeen boys from Baxter Terrace on probation. An examination of their records showed that of the nine white boys, eight of them were involved as a group in the same offenses, and of the eight Negro boys, four had formed a gang and together were involved in several robberies. As we stated before, two of these boys had probation records before coming to the project, and five others came from families with probation records. Some other relevant information about these delinquents follows:

	No of Delinquents	No with Work ing Mothers	No. from Broken Homes	No. Mentally Retarded
White	9	2	0	5
Negro	8	2	4	2
Total	17	4	4	7

From the preceding discussion it is clear that delinquency can only be understood in the framework of the total social situation of which housing is but one element. As stated at the opening of the chapter, the relationship between housing and delinquency is not a simple and direct one. Standard housing alone, in the sense of an adequate physical structure and facilities, is less important in understanding delinquency than is the "home," with the usual connotations of that term.

### Summary

- 1 In 1942 the rate for the combined projects was lower than for the combined wards, but this difference was not statistically significant. In 1943 the combined ward rate was significantly lower than the rate for the combined projects. However, for the individual projects the rate was lower than for the wards, with the exception of Baxter Terrace. The reasons for the high delinquency rate in this project have been discussed in this chapter.
- 2 The Negroes in the projects had lower delinquency rates than the Negroes in the wards.
- 3 There was no female juvenile delinquency in the projects.
- 4 One of the three projects included in this study, and several others of Newark's seven projects, had no delinquents.
- 5 The rate of adults on probation was lower in both years, for each of the projects than for the comparable wards. The combined project rate was lower than the combined ward rate in 1942 and 1943. The difference between these rates in 1942 was large enough so that it might be expected to occur by chance in only about 9 cases out of 100. However, in 1943 the difference between the rates was not as large, and could not be considered statistically significant.
- 6 The rate of adults on probation was lower for the three projects combined, than for the city as a whole.

**Table 24**  
**Rates, by Color, of Juveniles on Probation, per 1,000 Persons in the**  
**Projects, Wards and the City**

Area	Rates			Offenders		Population	
	1942	1943	1942-43 averaged	1942	1943	1942	1943
<i>Total Population</i>							
Baxter Terrace	0	5.5	2.8	0	13	2,344	2,344
Fuld Court	0	2.5	1.3	0	3	1,198	1,198
Crane Village	0	0	0	0	0	1,311	1,311
<b>3 PROJECTS</b>	<b>0</b>	<b>3.3</b>	<b>1.7</b>	<b>0</b>	<b>16</b>	<b>4,853</b>	<b>4,853</b>
Ward 15	1.5	1.9	1.7	16	18	10,656	9,656
"    3	3.7	3.1	3.4	92	76	24,802	24,802
"    1	1.2	1.0	1.1	32	28	26,000	27,000
<b>3 WARDS</b>	<b>2.3</b>	<b>2.0</b>	<b>2.2</b>	<b>140</b>	<b>122</b>	<b>61,458</b>	<b>61,458</b>
<i>White Population</i>							
Baxter Terrace	0	11.0	5.5	0	8	726	726
Fuld Court	0	1.8	.9	0	1	570	570
Crane Village	0	0	0	0	0	1,311	1,311
<b>3 PROJECTS</b>	<b>0</b>	<b>3.5</b>	<b>1.8</b>	<b>0</b>	<b>9</b>	<b>2,607</b>	<b>2,607</b>
Ward 15	.8	1.3	1.1	7	11	8,774	8,374
"    3	1.3	.7	1.0	14	6	10,830	8,430
"    1	1.0	.9	1.0	24	24	24,500	25,500
<b>3 WARDS</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>	<b>45</b>	<b>41</b>	<b>44,104</b>	<b>42,304</b>
<i>Negro Population</i>							
Baxter Terrace	0	3.1	1.6	0	5	1,618	1,618
Fuld Court	0	3.2	1.6	0	2	628	628
<b>2 PROJECTS</b>	<b>0</b>	<b>3.1</b>	<b>1.6</b>	<b>0</b>	<b>7</b>	<b>2,246</b>	<b>2,246</b>
Ward 15	4.8	5.5	5.2	9	7	1,882	1,282
"    3	5.6	4.3	5.0	78	70	13,972	16,372
<b>2 WARDS</b>	<b>5.5</b>	<b>4.4</b>	<b>5.0</b>	<b>87</b>	<b>77</b>	<b>15,854</b>	<b>17,654</b>
City—Total	1.0	1.1	1.1	432	479	429,000	440,000
City—White	.6	.7	.7	241	233	384,000	392,000
City—Negro	4.2	4.1	4.2	191	199	45,000	48,000

Table 25

Rates, by Color, of Juveniles on Probation, per 1,000 Boys 10 through 17  
in the Projects, Wards and the City

Area	Rates			Offenders		Population	
	1942	1943	1942-43 averaged	1942	1943	1942	1943
<i>Total Population</i>							
Baxter Terrace	0	66	33	0	13	197	197
Fuld Court	0	23	14	0	3	106	106
Crane Village	0	0	0	0	0	106	106
<b>3 PROJECTS</b>	<b>0</b>	<b>39</b>	<b>20</b>	<b>0</b>	<b>16</b>	<b>409</b>	<b>409</b>
Ward 15	15	19	17	12	14	804	727
" 3	43	35	39	71	58	1,636	1,636
" 1	13	9	11	27	20	2,158	2,241
<b>3 WARDS</b>	<b>24</b>	<b>20</b>	<b>22</b>	<b>110</b>	<b>92</b>	<b>4,598</b>	<b>4,604</b>
<i>White Population</i>							
Baxter Terrace	0	133	67	0	8	60	60
Fuld Court	0	19	10	0	1	54	54
Crane Village	0	0	0	0	0	106	106
<b>3 PROJECTS</b>	<b>0</b>	<b>41</b>	<b>21</b>	<b>0</b>	<b>9</b>	<b>220</b>	<b>220</b>
Ward 15	7	15	11	5	10	691	659
" 3	15	8	12	10	4	687	581
" 1	10	9	10	21	18	2,034	2,117
<b>3 WARDS</b>	<b>11</b>	<b>10</b>	<b>11</b>	<b>36</b>	<b>32</b>	<b>3,412</b>	<b>3,307</b>
<i>Negro Population</i>							
Baxter Terrace	0	86	18	0	5	137	137
Fuld Court	0	38	19	0	2	52	52
<b>2 PROJECTS</b>	<b>0</b>	<b>37</b>	<b>19</b>	<b>0</b>	<b>7</b>	<b>189</b>	<b>189</b>
Ward 15	54	48	51	7	4	129	83
" 3	64	48	56	61	54	955	1,121
<b>2 WARDS</b>	<b>63</b>	<b>48</b>	<b>56</b>	<b>68</b>	<b>58</b>	<b>1,084</b>	<b>1,204</b>
City—Total	12	18	13	353	400	29,601	30,360
City—White	9	9	9	241	248	26,406	26,952
City—Negro	44	45	45	141	152	3,195	3,408

Table 26  
Adults on Probation in the Projects, Wards and the City

Area	Rates			Offenders		Population	
	1942	1943	1942-43 averaged	1942	1943	1942	1943
(A) Per 1,000 Persons							
Baxter Terrace	.9	.9	.9	2	2	2,344	2,344
Fuld Court	0	1.7	.9	0	2	1,198	1,198
Crane Village	.8	1.5	1.2	1	2	1,311	1,311
3 PROJECTS	.6	1.2	.9	3	6	4,853	4,853
Ward 15	2.8	3.5	3.2	30	34	10,656	9,656
" 3	6.4	5.4	5.9	159	133	24,802	24,802
" 1	2.6	2.2	2.4	67	59	26,000	27,000
3 WARDS	4.2	3.7	4.0	256	226	61,458	61,458
CITY	2.0	1.8	1.9	872	806	429,000	440,000
(B) Per 1,000 Persons, 21 years and over							
Baxter Terrace	1.7	1.7	1.7	2	2	1,190	1,190
Fuld Court	0	3.3	1.7	0	2	599	599
Crane Village	1.5	3.1	2.3	1	2	647	647
3 PROJECTS	1.2	2.5	1.9	3	6	2,436	2,436
Ward 15	4.3	5.3	4.8	30	34	7,000	6,370
" 3	9.6	8.0	8.8	159	133	16,561	16,561
" 1	4.3	3.6	4.0	67	59	15,600	16,200
3 WARDS	6.5	5.3	6.2	256	226	39,161	39,131
CITY	3.0	2.7	2.9	872	806	291,720	299,200

## School Records

The relationship between housing and education has become a matter of interest to educators. In England, the following situation was found in regard to the influence of improved housing on school children.

In the report of a School Medical Officer of Health for 1930 extracts are given from statements by headmasters of grade elementary schools as to the improvement of children due to living in better housing. The following is an example:

### London Road School

*Cleanliness.* Improvement noticeable in nearly all cases.

*Sociability.* After close observation a distinct advance is evident, especially with the younger children between five and seven.

*Intelligence.* Practically all the children were from one to two years behind when they entered this school and were mostly dull and backward. I should say that 50 percent of them have noticeably improved in general intelligence.<sup>1</sup>

In our investigation an elementary school near one of the projects, attended by both white and Negro pupils, was selected for study. The school files showed that 93 children had lived in the project long enough to make their records useful. All of these children had lived in the project at least a year, and most had lived there longer.

Two methods of studying the possible influence of rehousing on school children were feasible. One was to compare the record of each child before living in the project with his record after living there. Since the project had been in existence about three years, it did not seem likely that any pronounced changes in school achievement could be expected. However, this method was adopted and the results are presented in the following pages.

The other method was to compare the records of the project children with those of children living outside the project. This method was also used and the records of 186 elementary school children were studied. One-half of these children resided in the project, the other half, the control group, came from the immediate neighborhood.

In an attempt to have both groups as similar as possible in all relevant respects but that of housing, the control and rehoused groups were matched. For each pupil residing in the project, one living outside was selected who was as similar as possible in regard to age, grade, race, sex, nationality, nativity of parents, and intelligence quotient. The socio-economic status of the children was about the same since they all came from a limited area, primarily occupied by persons in the

lower economic strata. The school was located in a "bad" neighborhood, and few of the pupils, in either the rehoused or control group, had superior records.

The two comparisons, one, of the records of the project children before and after living there, and the other, the comparison of the records of the rehoused children and those living outside the project, did not reveal any striking differences. However, there was a consistent trend in the direction of a superior showing for the rehoused children.

### Criteria Used

Letter grades were used by the school, but in order to make quantitative comparisons each letter was given a numerical value as follows. A (excellent) 4, B (good) 3, C (average) 2; D (passing) 1, and F (failure) 0. The total score for each child was averaged by the number of grades he received in academic work, personality development, and health habits. Academic work included reading, language, spelling, arithmetic and social science. Personality development covers, initiative, cooperation, dependability, industry, emotional stability and health habits. This last item in the personality development record, was studied separately on the ground that it might be more quickly affected by better housing, an adequate supply of heat and hot water, etc.

The academic grades by sex and color, for the rehoused group before and after living in the project, and for the control group, are given in Table 27, part A, at the end of this chapter. It was assumed that if the record of the rehoused group before moving into the project was about the same as that of the control group, this would indicate that our method was reliable, since it would show that the two groups were similar before the rehousing took place. We found that the average academic grade for the rehoused group before living in the project was 2.0, and it was exactly the same for the control group. However, for the rehoused group, after living in the project, the average grade rose to 2.2, showing a slight improvement over its previous record and over that of the control group.

### Improvement of Project Children

The greatest improvement was among the white boys whose average grade increased .4, whereas for the Negro boys there was a slight decrease of .1. For all of the boys there was an average increase of .2, after living in the project.

Among the girls, the white girls showed an improvement of .2, whereas the average grade for the Negro girls remained the same. This gave an increase of 1 for all the girls. The average grade for the girls after living in the project was .4

<sup>1</sup> Reiss, op. cit., p. 73.

higher than that of the girls in the control group.

Part B of this table gives the average grades for personality development. Again there is a slightly superior record for the rehoused group after living in the project than before living there, and the record is superior to that of the control group. The improvement was found entirely among the girls, who advanced from an average grade of 1.9 to 2.4, as compared with the grade of 2.0 for the control group. The greatest improvement, of .7, was made by the white girls. The Negro girls showed an improvement of .3.

Health habits was one of the items listed in the personality record and here too we find a higher average grade for the rehoused group after living in the project, than for either the control group or its own record before moving. There was an improvement of .4 after moving into the project, and an increase of 2 over the average grade of the control group.

The boys, both white and Negro, showed an increase of .2 after moving into the project. The white girls showed the greatest improvement, that of .7, while the Negro girls increased their average grade 3. The average grade of the boys for health habits, after living in the project, was 2.2, which was the same as that for the control group, but higher than its own previous record. The girls had an average grade of 2.7 or .3 higher than the grade of 2.4 for the control group. These data are given in Table 27, part C.

Since better housing might be expected to result in fewer colds and illness, and thereby less absence from school, the children's attendance records were studied. As is shown in Table 28, the rehoused group, before living in the project, had exactly the same average number of days of absence per semester as the control group, namely 7.3. However, after living in the project, the average number of days of absence was reduced to 6.8.

The improvement was primarily in the records of the boys, the white boys showing on the average, 1.2 days of absence less per semester after moving into the project, and the Negro boys 1 day less. Among the white girls there was more absence, to the extent of 1.8 days per semester, but among the Negro girls there was 1.8 days less absence after moving into the project.

### Working Mothers

An analysis was also made of the percentage of working mothers among the project children and those living outside. This information is given in Table 29. The school had previously made a survey and had the names of all children whose mothers worked. From this material, the data in Table 29 were obtained. Thirty-one percent of the project children and 32% of the children living outside of the project had mothers who worked outside the home. However, in many instances several of the children belonged to the same family, and in terms of the number of families represented, 34% in the project and 29% of the other families had working mothers.

Of about twelve teachers we talked to, the general opinion seemed to be that the project children were cleaner and neater than the average child, but that they were not necessarily superior in their academic work.

### Summary

The rehoused children showed an improvement over their previous records, and over the records of the control group,

- 1) in school work, as measured by their marks in academic subjects,
- 2) in personality development,
- 3) in health habits,
- 4) in attendance.

**Table 27**  
**Average Grades for Rehoused and Non-Rehoused**  
**Elementary School Pupils**

	Boys			Girls			Total Group
	White	Negro	Total	White	Negro	Total	
(A) Academic Grades							
Before Rehousing	1.6	2.0	1.8	2.2	2.3	2.3	2.0
After Rehousing	2.0	1.9	2.0	2.4	2.3	2.4	2.2
Control Group	2.0	1.8	1.9	2.0	2.0	2.0	2.0
(B) Personality Development Grades							
Before Rehousing	1.8	1.8	1.8	1.7	2.1	1.9	1.9
After Rehousing	1.8	1.9	1.9	2.4	2.4	2.4	2.2
Control Group	2.0	1.9	2.0	2.0	2.0	2.0	2.0
(C) Health Habits Grades							
Before Rehousing	1.8	2.1	2.0	2.0	2.3	2.2	2.1
After Rehousing	2.0	2.3	2.2	2.7	2.6	2.7	2.5
Control Group	2.2	2.1	2.2	2.3	2.4	2.4	2.3

**Table 28**  
**Average Number of Days of Absence per Semester Among**  
**Rehoused and Non-Rehoused Elementary School Pupils**

	Boys			Girls			Total Group
	White	Negro	Total	White	Negro	Total	
Before Rehousing	6.8	6.3	6.6	8.0	8.1	8.1	7.3
After Rehousing	5.6	5.3	5.5	9.8	6.3	8.1	6.8
Control Group	9.0	5.9	7.5	8.5	5.7	7.1	7.8

**Table 29**  
**Elementary School Pupils with Working Mothers in the**  
**Rehoused and Non-Rehoused Groups**

	Project Children		Remainder of School	
	Number	Percent	Number	Percent
Number of children	195	100	720	100
Number of children with working mothers	61	31	232	32
Number of families	126	100	374	100
Number of families with working mothers	43	34	110	29





**Part Five**  
**Conclusions**



## Conclusions

Before we present the conclusions that emerge from this study it is necessary to emphasize once again that their validity is largely dependent upon the methods of research employed, and especially upon the reliability of the control group. In comparing the projects with the wards, we pointed out that the housing situation in the wards was, on the whole, superior to the type of housing from which the project residents came. Consequently, in this respect, the results will be biased in favor of the wards.

This is borne out by the fact that when we compared the tuberculosis situation in one of the projects with that in a census tract, we found the difference in rates to be greater than when we compared the project with the ward. The reason for this is that the census tract is smaller, more homogeneous and more consistently typical of the type of situation from which the project residents came, than is the ward. We believe that had we been able to use census tracts instead of wards as control groups throughout this study, the superior showing of the rehoused groups would have been even greater than that brought out by the comparisons with the wards.

In selecting the criteria by which to evaluate specifically the social effects of rehousing, our choice was influenced by the quantitative and comparable data that were available. As always, the most difficult part of the study was the evaluation of the statistical results, especially since a period of two years is not sufficient for a definitive appraisal of the effects of rehousing. It can hardly be expected that the benefits of removing families from substandard to sanitary and pleasant homes, would be fully realized in so short a time. Also, over a longer period, even if the number of births, infant deaths, etc., were small, if this were consistently true, it would be possible to determine a trend. Our data, based in some instances on few cases as well as on a short period of time, did not enable us to do this. For these reasons follow-up investigations, based on longer periods of time, would be valuable in establishing more definitely and specifically the effects of rehousing people in adequate and healthful homes.

The case studies and interview results presented in Part II are also important from the point of view of establishing the beneficial effects of rehousing. The conclusion that rehousing has had such effects is reinforced by the cumulative evidence of the many other studies, made in this country and abroad, mentioned in the text.

Simplistic interpretations, in terms of one factor, are not possible in complex social phenomena. Causation is neither unilinear nor simple, but is reciprocal and complex, the effect itself being a cause in a new chain of events. That is why the analysis of the results must proceed cautiously, and we cannot assert dogmatically that the dif-

ferences found between the rehoused and control groups can be attributed totally to the difference in their housing conditions. But, since housing is the outstanding difference between these groups we may assume that rehousing has been an important factor in producing the difference.

A brief summary of the effects of the rehousing program in Newark, determined from a study of three public housing projects, and three control groups, represented by three wards, follows. In examining the rates that follow it should be remembered that even if the difference between the rates in the projects and in the wards is large, it does not necessarily mean that the difference is statistically significant. The extent to which the differences are statistically significant has been noted in the preceding chapters. The main conclusions from each of these chapters follow:

**Tuberculosis**—Each year, in the housing projects, 2.9 out of every 1,000 persons 15 to 40 contracted tuberculosis compared to 5.8 of every 1,000 persons in the wards. The rate for the three projects combined was lower than the combined ward rate in both years studied, for the white and the Negro populations. From 1942 to 1943 the rate for the combined projects decreased but for the wards it increased.

**Infant Mortality**—If the infant mortality rate in the wards had been as low as that in the projects for the two years, there would have been 41 infant deaths per year, instead of 50, in the three wards studied. In 1943 if the rate had been the same in the wards as in the projects, there would have been 20 cases instead of 52. In 1942 the infant mortality rate was higher in the combined projects than in the combined wards. But, in 1943, the rate was almost two-thirds lower in the projects than in the wards. In that year the combined project rate was much lower than the rate for the city as a whole.

**Communicable Diseases**—In 1942 there was a higher rate of communicable diseases in the combined projects than in the wards, but in 1943 the project rate was less than one-half of that in the wards. In 1943 the rate for the combined projects was also much lower than the rate for the city as a whole.

**Birth Rates**—The birth rate, adjusted to the number of women 15 to 40, was higher in the projects than in the wards in both years. Whereas the combined ward birth rate remained almost constant from 1942 to 1943, it declined in the projects.

**Fatal Home Accidents**—The superiority of the project population in this respect is shown by the fact that for 1942 and 1943 there was not a fatal home accident, as compared with 25 per 10,000 persons, in the wards studied. Had the 10,207 persons living in Newark's seven projects been living in their previous homes, there would have been

about three fatal home accidents among them, instead of none.

**Juvenile Delinquency**—With the exception of one project, the juvenile delinquency rate was lower in the projects than in the wards. The reasons for the higher rate in this one project are enumerated in the chapter on delinquency. In both projects with a Negro population, we found that the rate for the Negroes in the projects was lower than that for the Negroes in the wards. A number of projects had no cases of delinquency. There were no girl delinquents in the projects, although about 22% of the delinquents in the three wards studied were girls.

**Fires**—The number of fires, per 10,000 persons, in the seven housing projects in Newark was 7.9 as compared to 28.2 in the city's dwellings. If the city had the same rate of fires as the projects in 1942 there would have been 291 fires instead of 1,253. If, in 1942, the number of fires per 10,000 persons had been the same in the city as in the projects, the saving, at an estimated \$600 per fire call, would have been about \$574,200. This sum refers only to the cost of *responding to fires* and does not take into account the losses in life and property.

**School Children**—The records of the project children showed a slight improvement after the children had been rehoused. The average grades for the rehoused children in academic work, personality development, and health habits, were slightly better than those of the control group. There was less absence among the project children after being rehoused, and less than among the children of the control group.

**The Rehoused Families**—A sample of 5.5% of the families living in the three projects studied, were interviewed, with the following results:

- 1) 69% of the mothers said that their school children showed improvement since living in the project.
- 2) 99% found their children easier to keep clean.
- 3) 100% stated that their children had better play facilities.

- 4) 56% found that the housekeeping took less time since moving into the project.
- 5) 77% stated that their families were now happier.
- 6) 100% had no fires or serious home accidents.
- 7) 68% owing to lower rent were able to save money or purchase necessities and equipment for their homes.

**Families Waiting to be Rehoused**—Of the sixteen families interviewed who had made application and were waiting for apartments:

- 1) 56% of the mothers with school children felt that their children's school work would improve with better housing.
- 2) 92% said that their present dwellings affected their children's health.
- 3) 85% found their children difficult to keep clean with the facilities they had.
- 4) 100% said that their children had no play facilities.
- 5) 31% of the families had serious accidents in their homes.

Our study shows that public housing has had beneficial effects on the rehoused families and on the community. Every reduction in disease and accidents not only means a great diminution in suffering and unhappiness, but a tremendous saving in dollars and cents to the community.

Many people are still apt to look on good housing in merely mechanical terms of better structures, hot and cold water, refrigeration, etc. Their importance should not be underrated, but from a broader perspective, the social scientist sees good housing in terms of the kind of human relationships to which it is conducive. Bad housing—its squalor, health hazards, and lack of privacy—directly influences the texture of moral and social life. It is this, as well as the physical well being of man, that makes the problem of good housing of vital importance to every community.

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